

WPIDS

02/08/99

M.BORIN

Page 1

L13 17 FILE USPATFULL
L14 12 FILE WPIDS
L15 162 FILE BIOSIS
L16 83 FILE EMBASE
L17 117 FILE MEDLINE
L18 137 FILE CAPLUS
L19 65 FILE SCISEARCH
L20 0 FILE INVESTEXT
L21 6 FILE DRUGU
TOTAL FOR ALL FILES
L22 599 S LYSOSTAPHIN (10A) (ANTIMICROB#### OR MICROB### OR STAPHYLOCOC
L23 280 DUPLICATE REMOVE L15-L19 (284 DUPLICATES REMOVED)

=> d l14 bib, abs 1-14

L14 ANSWER 1 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 98-332208 [29] WPIDS
DNC C98-102903
TI Treatment of **staphylococcal** infections, especially mastitis -
uses recombinant bacteriocin **lysostaphin** originally from
Staphylococcus simulans.
DC B04 B05 C03 C06 D16
IN BLACKBURN, P; POLAK, J
PA (AMBI-N) AMBI INC
CYC 1
PI US 5760026 A 980602 (9829)* 10 pp
ADT US 5760026 A CIP of US 87-48412 870511, Cont of US 88-188183 880428, Cont
of US 90-535286 900608, Cont of US 92-935121 920820, US 94-303551 940909
PRAI US 88-188183 880428; US 87-48412 870511; US 90-535286 900608;
US 92-935121 920820; US 94-303551 940909
AN 98-332208 [29] WPIDS
AB US 5760026 A UPAB: 980722
Treatment of recurring staphylococcal mastitis resulting from
intracellular Staphylococcus aureus comprises administering to an infected
gland, by intramammary infusion, a therapeutic agent consisting of
bacteriocin lysostaphin produced by recombinant means, in a pharmaceutical
carrier in an amount sufficient to eliminate recurring staphylococcal
mastitis.
USE - The method is useful for the treatment of
staphylococcal infections, especially bovine mastitis, by the
administration of the bacteriocin **lysostaphin**. Mastitis is
caused by infection of bovine milk glands by S.aureus and S.agalactiae
(and some Gram negative bacteria, to a lesser extent), leading to
decreased and unusable milk production and in extreme cases, death. The
bacteriocin lysostaphin is a protein that is produced by S.simulans (NRRL
B-2628) that kills and lyses related bacteria. Antibacterial compositions
can be applied to teats for prophylactic use.
ADVANTAGE - Previous mastitis treatments rely on antibiotics where

09/120030

the disease has shown poor response to treatment, even re-occurring. Extensive treatment this way can also lead to antibiotic resistance strains of *Staphylococcus*.
Dwg.0/1

L14 ANSWER 2 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 96-117492 [13] WPIDS
DNC C96-037290
TI New lysostaphin gene with deletion in pro-segment repeat region - for prodn. of *Lactobacillus* strains useful in prodn. of fermented foods and as protective cultures to inhibit growth of *Staphylococcus*.
DC D13 D16
IN CAVADINI, C; HAMMES, W; HERTEL, C
PA (MUEL-N) MUELLER & CO KG KARL; (MUEL-N) MUELLER GMBH & CO KARL
CYC 12
PI DE 4425645 A1 960222 (9613)* 19 pp
EP 759473 A1 970226 (9714)# DE 21 pp
R: AT CH DK ES FR GB IE IT LI NL SE
ADT DE 4425645 A1 DE 94-4425645 940720; EP 759473 A1 EP 95-113211 950823
PRAI DE 94-4425645 940720; EP 95-113211 950823
AN 96-117492 [13] WPIDS
AB DE 4425645 A UPAB: 960329

New **lysostaphin** gene (A) of *Staphylococcus simulans* has a deletion in the repeat region of the pro segment. Also new are plasmids and microorganisms contg (A).

USE - The modified microorganisms are useful in fermentation (e.g. prodn. of meat prods.) and as protective cultures, against contamination by *Staphylococcus* in foods, (e.g. mayonnaise or milk products).

ADVANTAGE - Modified (A) can be expressed in food grade microorganisms, i.e. they produce active **lysostaphin** which is able to lyse most *Staphylococci* including food contaminants such as *S. aureus*. (A) expresses a protein with the normal pre-sequence, a truncated pro-sequence and a mature lysostaphin sequence. In *Lactobacillus* the signal and residual pro sequences are removed. The new cells do not integrate (A) into the genome and since they gradually lose the (A)-contg. plasmid can be released into the environment without danger.
Dwg.0/10

L14 ANSWER 3 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 94-148921 [18] WPIDS
DNC C94-068635
TI Prepn. of restricting endonuclease SAU 6782 - by culturing microorganism *Staphylococcus aureus* 6782. treating with **lysostaphin**, ultrasonically disintegrating and removing nucleic acids.
DC B04 D16
IN ARUTYUNYAN, E E; GONCHAR, N A; NIKOLSKAYA-SANOVICH, I I
PA (BIOL-R) BIOLOG MED CHEM INST; (VACC-R) VACCINE & SERUM INST
CYC 1
PI SU 1796676 A1 930223 (9418)* 5 pp
ADT SU 1796676 A1 SU 91-4920752 910320
PRAI SU 91-4920752 910320
AN 94-148921 [18] WPIDS
AB SU 1796676 A UPAB: 940622

Method involves culturing the microorganism *Staphylococcus aureus* 6782, treating the bacterial mass with **lysostaphin**, ultrasonic disintegration, removal of the nucleic acids by streptomycin sulphate, salting out of the proteins by ammonium sulphate, and cation exchange chromatography on R11 phosphocellulose.

The cation exchange chromatography is carried out directly after salting out of the proteins, using a double combined increasing NaCl concn. gradient from 0.0 to 1.0 M, and pH values decreasing from 9.0 to 6.0.

USE/ADVANTAGE - In biotechnology and genetic engineering, and in

molecular biology, genetic experiments in studying the structure and functions of DNA, and the construction of recombinant molecules.

In an example, cells of *Staphylococcus aureus* 6782 were cultured in a medium based on a casein trypsin hydrolysate and yeast water, and deposited by centrifuging. The bacterial mass was suspended in the working buffer (pH 7.4) contg. potassium phosphate, beta-mercaptoethanol, and EDTA, lysostaphin was added, and the mass was incubated at 20 deg.C. The cell suspension obtd. was subjected to ultrasonic disintegration and centrifuged at 105 thousand g for 1 hr, to give a supernatant liquid in the form of a crude extract, from which the nucleic acids were removed by means of streptomycin sulphate. The proteins were then salted out with ammonium sulphate, the deposit was dissolved in the buffer, the ammonium sulphate was dialysed out, and the soln. was subjected to column chromatography, with an NaCl concn. gradient increasing from 0.0 to 1.0 M, and the pH decreasing from 9 to 6. Restrictase was eluted in a narrow peak in the region of 0.4-0.45 M NaCl, and non-specific nucleases at 0.45-0.55 M NaCl concn. The R Sau 6782 preparation obtained contained an insignificant quantity of non-specific impurities, and the enzyme yield was 1300 units from 1 g of biomass, specific enzyme activity 60000 units per mg.
Dwg.0/0

L14 ANSWER 4 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 94-011014 [02] WPIDS

DNC C94-004489

TI Purificn. of **lysostaphin** endopeptidase - comprises absorbing LEP on **microbe** body having dissolution resistance against LEP.

DC B04 D16

PA (SAOC) MERCIAN CORP

CYC 1

PI JP 05317045 A 931203 (9402)* 4 pp

ADT JP 05317045 A JP 92-148955 920518

PRAI JP 92-148955 920518

AN 94-011014 [02] WPIDS

AB JP05317045 A UPAB: 940223

In the method, the LEP is adsorbed on a microbe body of a microbe having dissolution resistance against LEP or a treated prod. and then eluted. The microbe is pref. of *Staphylococcus* genus.

USE/ADVANTAGE - The method can prepare a prod. of high purity in a high yield very easily.

In an example, *Staphylococcus aureus* Kowa I (ATCC12598) was cultured in 50ml of a brain-heart infusion broth at 37 deg.C for 24 hours. The culture was centrifuged and the microbe body was suspended in PBS buffer to 108 cells/ml. LEP was added to it to 4 U/ml and cultured at 37 deg.C overnight. It was sepd. to a single colony in a nutrient agar medium to give a colony of LEP-resistant microbe, *Staphylococcus aureus* MY1. It was inoculated to 50ml of a tryptic soy broth and cultured at 37 deg.C for 24 hours. The culture was centrifuged and the microbe body was washed with 500 ul 50 mM Tris-HCl buffer and suspended in 100 ml 3M K thiocyanate and heated at 100 deg.C for 30 min.. The microbe body was collected by centrifugation and washed with 100 ml 3M K thiocyanate and then with 500 ml 50 mM Tris-HCl buffer and then suspended in 100 ml of the same buffer. The suspension was added to a culture supernatant contg. LEP to 1 x 10⁹ cells/ml and the mixture was stirred at 4 deg.C for 1 hour to absorb LEP specifically. LEP was eluted from it and the LEP soln. was dialysed and freeze-dried to give 7330 U of highly pure LEP.
Dwg.0/0

L14 ANSWER 5 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 93-054352 [07] WPIDS

DNC C93-024311

TI Detection of methicillin-resistant staphylococci - using polymerase chain reaction method, and DNA primers, for rapid, sensitive and accurate detection.

DC B04 D16
 IN SKATRUD, P L; UN S
 PA (ELIL) LILLY & CO ELI
 CYC 18
 PI EP 527628 A1 930217 (9307)* EN 16 pp
 CA 2075423 A 930214 (9318)
 JP 05329000 A 931214 (9403) 12 pp
 EP 527628 B1 960703 (9631) EN 17 pp
 R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
 DE 69211921 E 960808 (9637)
 ES 2089409 T3 961001 (9645)
 ADT EP 527628 A1 EP 92-307307 920810; CA 2075423 A CA 92-2075423 920806; JP
 05329000 A JP 92-214968 920812; EP 527628 B1 EP 92-307307 920810; DE
 69211921 E DE 92-611921 920810, EP 92-307307 920810; ES 2089409 T3 EP
 92-307307 920810
 FDT DE 69211921 E Based on EP 527628; ES 2089409 T3 Based on EP 527628
 PRAI US 91-744770 910813
 AN 93-054352 [07] WPIDS
 AB EP 527628 A UPAB: 931119

Method comprises (a) performing polymerase chain reaction (PCR) on samples, the PCR being primed by DNA primers, the DNA primers being composed of 2 oligonucleotides of high GC content, where one oligonucleotide has DNA sequence comprised of the coding strand of Staphylococcus mecA gene and the second DNA primer has DNA sequence comprised of the non-coding strand of a Staphylococcus mecA gene and (b) analysing the reaction prod.

Also claimed are (i) method for the rapid release of DNA from **Staphylococci** comprising (a) treating a sample contg. **Staphylococci** with **lysostaphin**, (b) treating the resulting sample with proteinase K and (c) incubating the resulting sample in a boiling water bath, (ii) method for detecting methicillin resistant staphylococcal infections in sample, comprising (a) carrying out steps (a)-(c) and (b) carrying out steps (a)-(b).

ADVANTAGE - The method can be used for the rapid, sensitive and accurate detection of methicillin-resistant Staphylococcal infections caused by e.g. methicillin-resistant S. aureus (MRSA) or methicillin-resistant S. epidermis (MRSE)
 Dwg.0/0

ABEQ EP 527628 B UPAB: 960808
 A method for detecting methicillin resistant staphylococcal infections, said method comprising: a) performing the polymerase chain reaction on clinical samples suspected of staphylococcal infection, said polymerase chain reaction being primed by DNA primers, said DNA primers being composed of two oligonucleotides of high GC content, wherein one oligonucleotide has a DNA sequence comprised by the coding strand of a Staphylococcus mecA gene and the second DNA primer has a DNA sequence comprised by the non-coding strand of a Staphylococcus mecA gene; and b) analyzing the reaction product of step a.
 Dwg.0/0

L14 ANSWER 6 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 92-151734 [19] WPIDS
 DNC C92-070227
 TI Lysostaphin prodn. - by culture of Staph. simulans on medium contg. pancreatic casein peptone, fractional pptn., dialysis and chromatography.
 DC B04 D16
 IN PAUL, P; REISSBRODT, R
 PA (REIS-I) REISSBRODT R
 CYC 1
 PI DE 4033752 A 920430 (9219)* 3 pp
 ADT DE 4033752 A DE 90-4033752 901024
 PRAI DE 90-4033752 901024
 AN 92-151734 [19] WPIDS

AB DE 4033752 A UPAB: 931006
 Prodn. of lysostaphin (I), a staphylococci-lysing enzyme complex from Staph. simulans var. staphylophilus comprises (1) adding pancreatic casein peptone (A), chosen according to its analysed nutrient parameters, to a standard nutrient medium for growing the prodn. strain so as to regulate the subsequent purification process, (2) pre-purification of (I) by fractional (NH₄)₂SO₄ pptn. from the culture supernatant, (3) removing DNase from crude (I) by treatment with urea and dialysis, (4) stabilising the labile (I) complex (isolated by chromatography using a IMNaCl gradient) with protective colloids (e.g. gelatine-sucrose) and freeze drying.
 USE/ADVANTAGE - (I) is used for simple and rapid differentiation between staphylococci (lysed) and micrococci (resistant) and can also be used in bacterial-genetic investigation and for isolation of bacterial metabolite. The method provides (I) of high activity and free of DNase.
 (0/3)
 0/3

L14 ANSWER 7 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 90-290108 [38] WPIDS
 DNC C90-125224

TI Novel lanthionine contg. bacteriocin and lysostaphin compsns. - useful as enhanced broad range bactericides.

DC B04 D13 D22 P34
 IN BLACKBURN, P; GUSIK, S; POLAK, J; RUBINO, S D; GUSIK, S A
 PA (PUBL-N) PUBLIC HEALTH RES INST NEW YORK; (MICR-N) APPLIED MICROBIOLOGY INC; (PUBL-N) PUBLIC HEALTH RES

CYC 16
 PI WO 9009739 A 900907 (9038)*
 AU 9052850 A 900926 (9050)
 ZA 9001499 A 901128 (9102)
 US 4980163 A 901225 (9103)
 FI 9005378 A 901031 (9107)
 NO 9004729 A 901115 (9114)
 EP 424484 A 910502 (9118)
 HU 55607 T 910628 (9131)
 CS 9000984 A 910716 (9143)
 JP 03504864 W 911024 (9149)
 NZ 232700 A 921028 (9301)
 DD 301903 A9 940630 (9431)
 EP 424484 B1 940810 (9431) EN 10 PP
 DE 69011460 E 940915 (9436)
 IL 93527 A 950315 (9517)
 CZ 279273 B6 950315 (9520)
 IE 64710 B 950823 (9542)
 RU 2048151 C1 951120 (9629)
 CA 2028140 C 961203 (9708)

ADT ZA 9001499 A ZA 90-1499 900227; US 4980163 A US 89-317627 890301; EP 424484 A EP 90-904988 900227; JP 03504864 W JP 90-504798 900227; NZ 232700 A NZ 90-232700 900227; DD 301903 A9 DD 90-338282 900301; EP 424484 B1 EP 90-904988 900227; WO 90-US1053 900227; DE 69011460 E DE 90-611460 900227; EP 90-904988 900227; WO 90-US1053 900227; IL 93527 A IL 90-93527 900226; CZ 279273 B6 CS 90-984 900301; IE 64710 B IE 90-721 900228; RU 2048151 C1 SU 90-4831853 900227; CA 2028140 C CA 90-2028140 900227
 FDT EP 424484 B1 Based on WO 9009739; DE 69011460 E Based on EP 424484, Based on WO 9009739; CZ 279273 B6 Previous Publ. CS 9000984

PRAI US 89-317627 890301
 AN 90-290108 [38] WPIDS

AB WO 9009739 A UPAB: 930928
 Novel compsn. comprising lysostaphin and a lanthionine contg. bacteriocin.
 Pref. lanthionic bacteriocin is selected from rosin,

ABEQ US 4980163 A UPAB: 930928
 New broad range antibacterial compsn. comprises lysostaphin and

lanthionine containing bacteriocin opt. with chelator and surfactant.

Pref. bacteriocin is nisin, subtilin, epidermin, cinnamycin, duramycin, ancovenin or Pep 5, and chelators include EDTA, with triton or Tween etc. as surfactant.

USE/ADVANTAGE - More effective bactericidal effect against broad range microbial infections esp. Gram +- than **lysostaphin** alone. Effective conc. 0.1-100mcg/ml lysostaphin: 0.1-300 mcg/ml nisin; 0.1-20 mM chelator; 0.01-1 % vol. surfactant. @

ABEQ EP 424484 B UPAB: 940921

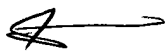
A composition comprising lysostaphin and a lanthionine containing bacteriocin.

Dwg.0/0

L14 ANSWER 8 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 89-324396 [44] WPIDS

DNC C89-143659

TI Compsn. for preventing **staphylococcal** infections - contains **lysostaphin**, surfactant and penicillin for synergistic effect. 

DC B05 C03 D16

IN BLACKBURN, P; POLLAK, J; POLLACK, J

PA (MICR-N) APPLIED MICROBIOLOGY INC; (PUBL-N) PUBLIC HEALTH RES

CYC 22

PI ZA 8806446 A 890830 (8944)* 38 pp

EP 359873 A 900328 (9013)# EN

R: AT BE CH DE ES FR GB GR IT LI LU NL SE

PT 88472 A 900330 (9017)#

JP 02083336 A 900323 (9018)#

AU 8821793 A 900308 (9019)#

DK 8804846 A 900301 (9019)#

HU 55229 T 910528 (9127)#

EP 359873 B1 930915 (9337)# EN 15 pp

R: AT BE CH DE FR GB IT LI LU NL SE

DE 3884200 G 931021 (9343)#

JP 06045553 B2 940615 (9422)# 13 pp

CA 1330758 C 940719 (9434)#

IE 63009 B 950322 (9521)#

IL 87686 A 951231 (9614)#

ADT ZA 8806446 A ZA 88-6446 880830; EP 359873 A EP 88-308667 880919; JP 02083336 A JP 88-234685 880919; EP 359873 B1 EP 88-308667 880919; DE 3884200 G DE 88-3884200 880919, EP 88-308667 880919; JP 06045553 B2 JP 88-234685 880919; CA 1330758 C CA 88-575957 880829; IE 63009 B IE 88-2675 880905; IL 87686 A IL 88-87686 880906

FDT DE 3884200 G Based on EP 359873; JP 06045553 B2 Based on JP 02083336

PRAI ZA 88-6446 880830; EP 88-308667 880919; JP 88-234685 880919;

DE 88-3884200 880919; CA 88-575957 880829; IE 88-2675 880905;

IL 88-87686 880906

AN 89-324396 [44] WPIDS

AB ZA 8806446 A UPAB: 931129

Compsn. (A) for killing **staphylococci** comprises **lysostaphin** (I) and synergist(s) from penicillin, synthetic penicillins, other antibiotics, chelating agents, mild surfactants and other membrane active agents, in amts. effective to kill staphylococci.

Preventing bovine mastitis comprises dipping teats in a soln. (B) of 0.01-10.0 mcg/ml of (I) in a suitable carrier, before and after each milking. The compsn. (A) and teat dip soln. (B) may also comprise lysozyme and mutanolysin.

USE/ADVANTAGE - Used for treatment and prevention of staphylococcal infections esp. bovine mastitis. (I) is effective even against chronic mastitis without adverse immunogenic effects. The compsn. is highly synergistic, with potentiation of (I) by e.g. 1000 times or more when surfactants are added. The compsn. may also be infused into the infected udder, and is also useful in wound dressings and medications, disinfectant scrubs, wipes or lotions, and in surgical implants. Compsns. may also be

used for cleaning medical instruments, surfaces, bedding, etc., for food-related uses (treatment of meat, eggs, cheese and fish or food packaging and handling appts.), and for nasal infusion to reduce intranasal carriage of Staphylococci. (Provisional Basic previously advised in week 8939)
Dwg.0/1

ABEQ EP 359873 B UPAB: 931123

A **lysostaphin**-containing composition for killing **staphylococci** (and which therefore does not itself contain **staphylococci**), characterised in that it also comprises at least one cell wall-active antibiotic in an amount effective synergistically to enhance the bactericidal effect of **lysostaphin** against **staphylococcal** mastitis.
Dwg.0/1

L14 ANSWER 9 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 89-216318 [30] WPIDS

DNC C89-096165

TI Genetic DNA - used for prodn. of protein which binds with Fc part of immunoglobulin G.

DC B04 D16

PA (SAOC) SANRAKU OCEAN CO LTD

CYC 1

PI JP 01153093 A 890615 (8930)* 7 pp

ADT JP 01153093 A JP 87-311037 871210

PRAI JP 87-311037 871210

AN 89-216318 [30] WPIDS

AB JP01153093 A UPAB: 930923

Genetic DNA is claimed which relates to prodn. of protein that can bind with the Fc part of immunoglobulin G. The scale of the molecule is ca. 1.05 kb, and it has a sensitivity against restriction enzymes, namely (a) has one recognition site by ClaI, ScaI, SalI, Sau3A, EcoRI, SacI, AccI, and (b) is not cleaved by BglII, EcoRV, STuI, PvuII, HpaI, XhoI, BclI, KpnI, Sph.

Pref. the protein A-like substance is SRP-2 (m.w.: 24,000, i.p.: pH 4.5, U.V. 275 nm max. (E 1%/1 cm = 1.60); binding affinity with human IgG 11 mg/mg). Cells of **Staphylococcus aureus** SR-1 are lysed with **lysostaphin**, and whole DNA is extracted. It is partly decomposed with Sau3A, and 2-10 kb DNA is purified and obtd. by agarose electrophoresis. Plasmid vector pUC8 is decomposed with BamHI, and both decomposed fragments are combined and ligated with T4 ligase. Thus obtd. recombinant plasmid is used for transformation of E.coli JM103, then a plasmid reserving colony is selected by ampicillin contg. selective medium, (E. coli 7-3, FERM-9746).

USE/ADVANTAGE - By transforming various host bacteria with the genetic RNA contg. recombinant plasmid, protein A-like protein producibility can be expressed to the transformant, and is useful for prodn. of the protein.

L14 ANSWER 10 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 87-306856 [43] WPIDS

DNC C87-130725

TI Recombinant plasmids contg. gene for **lysostaphin** - a bactericide specific for **staphylococci**, and transformed **microbial** hosts.

DC B04 D16

IN RECSEI, P A

PA (PUBL-N) PUBLIC HEALTH RES; (MICR-N) APPLIED MICROBIOLOGY INC; (PUBL-N) PUBLIC HEALTH RES INST INC CITY NEW YORK

CYC 21

PI WO 8706264 A 871022 (8743)* EN 34 pp

RW: AT BE CH DE FR GB IT LU NL SE

W: AU DK FI HU JP

ZA 8702687 A 871116 (8804)

AU 8773021 A 87009 (8805)
PT 84705 A 87021 (8822)
DK 8706592 A 871215 (8834)
EP 299978 A 890125 (8904) EN
R: AT BE CH DE FR GB IT LI LU NL SE
FI 8804691 A 881012 (8927)
JP 01503036 W 891019 (8948)
HU 50874 T 900328 (9019)
US 4931390 A 900605 (9026)
CA 1297051 C 920310 (9216)
IL 82260 A 920818 (9244)
EP 299978 B1 930804 (9331) EN 22 pp
R: AT BE CH DE FR GB IT LI LU NL SE
DE 3786918 G 930909 (9337)
FI 96322 B 960229 (9613)

ADT WO 8706264 A WO 87-US873 870415; ZA 8702687 A ZA 87-2687 870414; EP 299978
A EP 87-903128 870415; JP 01503036 W JP 87-502621 870415; US 4931390 A US
87-34464 870410; IL 82260 A IL 87-82260 870415; EP 299978 B1 EP 87-903128
870415, WO 87-US873 870415; DE 3786918 G DE 87-3786918 870415, EP
87-903128 870415, WO 87-US873 870415; FI 96322 B WO 87-US873 870415, FI
88-4691 881012

FDT EP 299978 B1 Based on WO 8706264; DE 3786918 G Based on EP 299978, Based
on WO 8706264

PRAI US 87-34464 870410; US 86-852407 860416
AN 87-306856 [43] WPIDS
AB WO 8706264 A UPAB: 960520

Recombinant plasmids able to express a gene coding for **lysostaphin**
(I) in a transformed **microbial** host are new. Also new are (1)
the transformed microorganisms; (2) pure (I) free of immunogenic
staphylococcal contaminants, and (3) a 1.5 kb DNA fragment coding for (I).
Hosts are E.coli K-12 JM105 (transformed with plasmid pRG5); Bacillus
sphaericus strain 00 (plasmid pJPl) and B.subtilis DB170 (plasmids, pJPl,
pDF8 or pRP1). The 1.5 kb fragment (complete sequence reproduced)
comprises promoter sequences (nucleotides 89-95 and 110-119);
ribosome-binding site (231-235) and an open reading frame from TTG
(245-247) to TGA (1412-1414), coding for preprolysostaphin (PPL). PPL is a
precursor for mature, active (I) and contains a signal peptide and
prelysostaphin (PL) which is processed to mature (I) by cleavage of the
Arg-Ala (143-144) bond in PL. PPL contains 389 amino acids.

USE/ADVANTAGE - (I) is a bacteriocin which kills most Staphylococcal
species but not other bacteria. The transformants produce (I) identical
with the natural material and sometimes at a much higher level than S.
simulans.
0/1
Dwg.0/1

ABEQ US 4931390 A UPAB: 930922
Recombinant plasmids contain a DNA sequence which codes for lysostaphin,
which expresses a gene encoding **lysostaphin** from staphylococcus
simulans (NRRL 2-2228) in transformant **microbial** hosts. Pref.
recombinant plasmid comprises pRGS, pJPl, pDF8, or pRP1. Transformed
microorganism comprises E.coli a yeast, Streptomyces, spp., or Bacillus
ssp.

ADVANTAGE - Bacillus sphaericus strain oo/pJpl transformants produce
5 times the amt. of prod. as S.simulans.

ABEQ EP 299978 B UPAB: 931118
A 1.5 kilobase DNA coding for lysostaphin, which comprises a nucleotide
sequence of Formula I: having an open reading frame extending from a TTG
initiation codon at nucleotides 245-247 to a TGA termination codon at
nucleotides 1412-1414, the open reading frame coding for
prepropysostaphin, which is a precursor to mature active lysostaphin,
having a sequence of 389 amino acids which comprises a signal peptide and
prolysostaphin, which is processed after synthesis to mature lysostaphin.
Dwg.0/1

L14 ANSWER 11 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 72-67951T [43] WPIDS
TI **Lysostaphin** - from cultivation of **staphylococcus** staph
ylolyticus in media contg enzymatically hydrolysed casein.
DC B04 D16
PA (BRIM) BRISTOL-MYERS CANADA LTD
CYC 1
PI CA 911917 A (7243)*
PRAI CA 68-20358 680517
AN 72-67951T [43] WPIDS
AB CA 911917 A UPAB: 930831

Lysostaphin is produced by cultivating a strain of
Staphylococcus staphylolyticus in an aq. nutrient medium contg. C
and N supplying nutrients. The medium contains ≥ 4 , pref. 4-10 % wt
enzymatically hydrolysed casein as N-supplying nutrient and its pH is
6.5-8.5. The C source is pref. $\geq 0.5\%$ wt glycerol, mannose or galactose.
The product is an antibiotic which specif. lyses **Staphylococcus** organisms.
By this method an increased yield of product is possible and the need for
pH adjustment is eliminated if the prefd. C source is used.

L14 ANSWER 12 OF 12 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 66-33531F [00] WPIDS
TI Fermentative production of lysostaphin antibiotic.
DC B00
PA (MEAD) MEAD JOHNSON & CO
CYC 8
PI US 3398056 A (6800)*
BE 716314 A (6801)
FR 1574204 A (6801)
NL 6807706 A (6801)
GB 1196835 A (7026)
CH 509408 A (7137)
JP 47013719 B (7217)
DE 1767687 A 710902 (8517)
PRAI US 64-381684 640710
AN 66-33531F [00] WPIDS
AB US 3398056 A UPAB: 930831

A process for the production of **lysostaphin** by the fermentation
of **Staphylococcus** staphylolyticus in an aqueous nutrient medium,
in which one or both of the following improvements are
incorporated in the process:

- (1) the fermentation is carried out at pH 6.5-8.5 in the
presence of at least 4% w/w enzymatically hydrolysed casein.
 - (2) the fermentation is carried out at pH 6.4-8.5 in the
presence of at least 0.5% of glycerol, mannose or galactose.
- Antibiotic.

L13 17 FILE USPATFULL
L14 12 FILE WPIDS
L15 162 FILE BIOSIS
L16 83 FILE EMBASE
L17 117 FILE MEDLINE
L18 137 FILE CAPLUS
L19 65 FILE SCISEARCH
L20 0 FILE INVESTEXT
L21 6 FILE DRUGU

TOTAL FOR ALL FILES

L22 599 S LYSOSTAPHIN (10A) (ANTIMICROB#### OR MICROB### OR STAPHYLOCOCC
L23 280 DUPLICATE REMOVE L15-L19 (284 DUPLICATES REMOVED)

=> d l23 an,ti 50-280

L23 ANSWER 50 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1992:520872 BIOSIS

TI INHIBITORY EFFECT OF 5 QUINOLONES ON DNA GYRASE FROM STAPHYLOCOCCUS-
AUREUS.

L23 ANSWER 51 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1993:204544 BIOSIS

TI Sensitivity of Dermatophilus congolensis to antibiotic substances of
staphylococci.

L23 ANSWER 52 OF 280 CAPLUS COPYRIGHT 1999 ACS

AN 1992:229239 CAPLUS

DN 116:229239

TI Cloning and expression of the lysostaphin gene in Bacillus subtilis and
Lactobacillus casei

L23 ANSWER 53 OF 280 CAPLUS COPYRIGHT 1999 ACS

AN 1992:124351 CAPLUS

DN 116:124351

TI EGTA inhibition of DNase activity in commercial lysostaphin preparations

L23 ANSWER 54 OF 280 CAPLUS COPYRIGHT 1999 ACS

AN 1992:231723 CAPLUS

DN 116:231723

TI Purification and application of lysostaphin

L23 ANSWER 55 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS . DUPLICATE 29

AN 1992:93289 BIOSIS

TI LYSOSTAPHIN USE OF A RECOMBINANT BACTERICIDAL ENZYME AS A MASTITIS
THERAPEUTIC.

L23 ANSWER 56 OF 280 CAPLUS COPYRIGHT 1999 ACS

AN 1991:486327 CAPLUS

DN 115:86327
 TI femA, which encodes a factor essential for expression of methicillin resistance, affects glycine content of peptidoglycan in methicillin-resistant and methicillin-susceptible *Staphylococcus aureus* strains

L23 ANSWER 57 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1993:3667 CAPLUS
 DN 118:3667
 TI Biochemical and genomic characteristics of Micrococcaceae from French dry sausages

L23 ANSWER 58 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 30
 AN 1991:459340 BIOSIS
 TI VISUALIZATION OF ENDO-BETA-N-ACETYLGLUCOSAMINIDASE LYSOZYME AND LYSOSTAPHIN AFTER POLYACRYLAMIDE GEL ELECTROPHORESIS IN THE PRESENCE OF SDS.

L23 ANSWER 59 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V. DUPLICATE 31
 AN 91012053 EMBASE
 TI .beta.-Lactamase is encoded on plasmid pACK3 in *Staphylococcus simulans* biovar *staphylolyticus*.

L23 ANSWER 60 OF 280 MEDLINE
 AN 91169234 MEDLINE
 TI Beta-lactamase is encoded on plasmid pACK3 in *Staphylococcus simulans* biovar *staphylolyticus*.

L23 ANSWER 61 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 32
 AN 1991:431094 BIOSIS
 TI SEQUENCE ANALYSIS OF A STAPHYLOCOCCUS-AUREUS GENE ENCODING A PEPTIDOGLYCAN HYDROLASE ACTIVITY.

L23 ANSWER 62 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1992:55305 CAPLUS
 DN 116:55305
 TI Characteristics of extracellular protein production by a plasmidless derivative of *Staphylococcus simulans* biovar *staphylolyticus*

L23 ANSWER 63 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1991:651266 CAPLUS
 DN 115:251266
 TI Heat stable nuclease contamination of lysostraphin (final report)

L23 ANSWER 64 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1991:120163 CAPLUS
 DN 114:120163 -
 TI Lysostaphin digestion in preparation of vaccines

L23 ANSWER 65 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1991:214519 CAPLUS
 DN 114:214519
 TI Synergistic bactericidal compositions comprising lysostaphin and a lanthionine-containing bacteriocin

L23 ANSWER 66 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 33
 AN 1991:5783 BIOSIS
 TI EFFECT OF BITEK AGAR ON LYSOSTAPHIN SUSCEPTIBILITY OF STAPHYLOCOCCI.

L23 ANSWER 67 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:526103 CAPLUS
 DN 113:126103

TI The antibacterial activity of benzylpenicillin against *Staphylococcus aureus* ingested granulocytes

L23 ANSWER 68 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:492688 CAPLUS
 DN 113:92688
 TI New mold starter cultures by genetic modification

L23 ANSWER 69 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:629004 CAPLUS
 DN 113:229004
 TI Solubilization of group- and type-specific streptococcal antigens with a mureolytic enzyme from *Staphylococcus hyicus*

L23 ANSWER 70 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 34
 AN 1991:28241 BIOSIS
 TI RAPID PURIFICATION METHOD OF LYSOSTAPHIN FOR ANALYSIS OF CELL WALL PROTEINS.

L23 ANSWER 71 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 35
 AN 1990:423362 BIOSIS
 TI EFFECTS OF **LYSOSTAPHIN** ON **STAPHYLOCOCCUS-AUREUS** INFECTIONS OF THE MOUSE MAMMARY GLAND. ✓

L23 ANSWER 72 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:455476 CAPLUS
 DN 113:55476
 TI Biochemical characteristics of *Staphylococcus* species of human and bovine origin

L23 ANSWER 73 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:494653 CAPLUS
 DN 113:94653
 TI Inhibition of the bacteriolytic effect of .beta.-lactam-antibiotics on *Staphylococcus aureus* by the polyanionic drugs suramin and Evans Blue

L23 ANSWER 74 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:484861 CAPLUS
 DN 113:84861
 TI Bactericidal compositions containing lysostaphin ✓

L23 ANSWER 75 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:135576 CAPLUS
 DN 112:135576
 TI Process for the selective cleavage of fusion proteins with polyglycine-specific endoproteinase

L23 ANSWER 76 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1989:630563 CAPLUS
 DN 111:230563
 TI Process for obtaining staphylococcal capsule polysides and their use as vaccines and in diagnosis

L23 ANSWER 77 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 36
 AN 1989:264380 BIOSIS
 TI SUSCEPTIBILITY OF METHICILLIN-RESISTANT **STAPHYLOCOCCUS-AUREUS** TO **LYSOSTAPHIN**. ✓

L23 ANSWER 78 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 37
 AN 1989:334426 BIOSIS
 TI PLASMID-ENCODED **LYSOSTAPHIN** ENDOPEPTIDASE RESISTANCE OF **STAPHYLOCOCCUS-SIMULANS** BIOVAR *STAPHYLOLYTICUS*.

L23 ANSWER 79 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 38
 AN 1989:136303 BIOSIS
 TI ANTIBODY RESPONSE TO STAPHYLOCOCCUS-AUREUS SURFACE PROTEINS IN RABBITS WITH PERSISTENT OSTEOMYELITIS AFTER TREATMENT WITH DEMINERALIZED BONE IMPLANTS.

L23 ANSWER 80 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 39
 AN 1989:473586 BIOSIS
 TI A COMPARISON OF THE RAPID THERMONUCLEASE TEST AND THE **LYSOSTAPHIN** SUSCEPTIBILITY TEST IN THE PRESUMPTIVE IDENTIFICATION OF **STAPHYLOCOCCUS-AUREUS** FROM POSITIVE BACTEC BLOOD CULTURES.

L23 ANSWER 81 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1989:492596 CAPLUS
 DN 111:92596
 TI The spectrophotometric assay and kinetic properties of lysostaphin

L23 ANSWER 82 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1989:398226 BIOSIS
 TI RESISTANCE OF **STAPHYLOCOCCUS-SIMULANS** BIOVAR **STAPHYLOLYTICUS** TO **LYSOSTAPHIN** ENDOPEPTIDASE IS PLASMID ENCODED.

L23 ANSWER 83 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1989:411960 BIOSIS
 TI A LYSOZYME ISOLATED FROM RAINBOW TROUT ACTS ON MASTITIS PATHOGENS.

L23 ANSWER 84 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1989:335440 BIOSIS
 TI USE OF **STAPHYLOCOCCUS-AUREUS** AND **LYSOSTAPHIN** IN AN ASSAY OF PHAGOCYTOSIS AND INTRACELLULAR KILLING.

L23 ANSWER 85 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1989:529497 CAPLUS
 DN 111:129497
 TI Prolysostaphin-processing protease from *Staphylococcus simulans*--purification and some properties


L23 ANSWER 86 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1990:93181 CAPLUS
 DN 112:93181
 TI Cloning and expression of lysostaphin gene in *Escherichia coli* and *Bacillus subtilis*

L23 ANSWER 87 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1990:188813 BIOSIS
 TI EXPRESSION OF **LYSOSTAPHIN** IN THE MILK OF TRANSGENIC ANIMALS TO COMBAT **STAPHYLOCOCCAL** MASTITIS.

L23 ANSWER 88 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 40
 AN 1988:436975 BIOSIS
 TI DNA GYRASE OF **STAPHYLOCOCCUS-AUREUS** AND INHIBITORY EFFECT OF QUINOLONES ON ITS ACTIVITY.

L23 ANSWER 89 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1989:495036 CAPLUS
 DN 111:95036
 TI Removal of surface adherent *Staphylococcus aureus* in the determination of phagocytosis and intracellular killing by the use of lysostaphin

L23 ANSWER 90 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1988:201621 CAPLUS
 DN 108:201621
 TI Plasmid curing in *Staphylococcus aureus* by antibiotics affecting the

- L23 ANSWER 91 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1989:570481 CAPLUS
DN 111:170481
TI Extraction of chromosomal DNA from Staphylococcus and Listeria by a rapid achomopeptidase method
- L23 ANSWER 92 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1988:411930 BIOSIS
TI **LYSOSTAPHIN** EFFICACY FOR TREATMENT OF **STAPHYLOCOCCUS** -AUREUS INTRAMAMMARY INFECTION. 
- L23 ANSWER 93 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1988:305723 BIOSIS
TI CORRELATION BETWEEN DNA BASE COMPOSITION AND ROUTINE TESTS FOR THE IDENTIFICATION OF MICROCOCCACEAE ISOLATED FROM SHEEP'S MILK CHEESE.
- L23 ANSWER 94 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 41
AN 1988:354376 BIOSIS
TI A DYE RELEASE ASSAY FOR DETERMINATION OF LYSOSTAPHIN ACTIVITY.
- L23 ANSWER 95 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 42
AN 1988:361059 BIOSIS
TI THE USE OF A MULTIPOINT INOCULATION METHOD TO PERFORM **LYSOSTAPHIN** LYSOZYME AND GLYCEROL-ERYTHROMYCIN TESTS FOR THE DIFFERENTIATION OF **STAPHYLOCOCCI** AND MICROCOCCI.
- L23 ANSWER 96 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 43
AN 1988:505344 BIOSIS
TI USE OF **LYSOSTAPHIN** AND BACITRACIN SUSCEPTIBILITY FOR ROUTINE PRESUMPTIVE IDENTIFICATION OF **STAPHYLOCOCCI** OF BOVINE ORIGIN.
- L23 ANSWER 97 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1988:449617 CAPLUS
DN 109:49617
TI Lysostaphin, construction of its expression plasmids, and its manufacture with Escherichia and Bacillus
- L23 ANSWER 98 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 44
AN 1987:401901 BIOSIS
TI ISOLATION OF STOMATOCOCCUS-MUCILAGINOSUS FROM DRUG USER WITH ENDOCARDITIS.
- L23 ANSWER 99 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 45
AN 1987:209525 BIOSIS
TI CLONING SEQUENCE AND EXPRESSION OF THE **LYSOSTAPHIN** GENE FROM **STAPHYLOCOCCUS**-SIMULANS.
- L23 ANSWER 100 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 46
AN 1987:229890 BIOSIS
TI ANALYSIS BY GEL ELECTROPHORESIS WESTERN BLOT AND PEPTIDE MAPPING OF PROTEIN A HETEROGENEITY IN STAPHYLOCOCCUS-AUREUS STRAINS.
- L23 ANSWER 101 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 47
AN 1988:8625 BIOSIS
TI THE MOLECULAR ORGANIZATION OF THE LYSOSTAPHIN GENE AND ITS SEQUENCES REPEATED IN TANDEM.
- L23 ANSWER 102 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1987:240882 BIOSIS
TI COMPARISON OF 5 METHODS OF DIFFERENTIATING STAPHYLOCOCCUS FROM MICROCOCCUS.

L23 ANSWER 103 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1988:287212 BIOSIS
TI BACTERICIDAL ACTIVITY OF BLOOD PLATELETS ITS DETERMINATION AND NORMAL VALUES.

L23 ANSWER 104 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 48
AN 1987:470749 BIOSIS
TI PLASMID-ENCODED **LYSOSTAPHIN** ENDOPEPTIDASE GENE OF **STAPHYLOCOCCUS-SIMULANS** BIOVAR **STAPHYLOLYTICUS**.

L23 ANSWER 105 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 49
AN 1987:145629 BIOSIS
TI **LYSOSTAPHIN** LYSIS PROCEDURE FOR DETECTION OF **STAPHYLOCOCCUS-AUREUS** BY THE FIREFLY BIOLUMINESCENT ATP METHOD.

L23 ANSWER 106 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 50
AN 1986:316342 BIOSIS
TI RAPID **LYSOSTAPHIN** TEST TO DIFFERENTIATE **STAPHYLOCOCCUS** AND **MICROCOCCUS** SPECIES.

L23 ANSWER 107 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 51
AN 1987:82789 BIOSIS
TI **LYSOSTAPHIN**-BASED ASSAY OF HUMAN GRANULOCYTE FUNCTIONS A REEVALUATION.

L23 ANSWER 108 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1987:206810 BIOSIS
TI SYSTEM FOR TESTING THE PHAGOCYTIC CAPACITY OF HUMAN BLOOD PLATELETS.

L23 ANSWER 109 OF 280 MEDLINE
AN 86318215 MEDLINE
TI [Differentiation between **Staphylococcus** and **Micrococcus** genera in the routine laboratory diagnosis using the **lysostaphin** sensitivity test].
Die Differenzierung zwischen den Genera **Staphylococcus** und **Micrococcus** im Routinelaboratorium mit Hilfe des Tests auf **Lysostaphin**-Empfindlichkeit.

L23 ANSWER 110 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1986:252980 BIOSIS
TI A RAPID SIMPLE **LYSOSTAPHIN** SUSCEPTIBILITY TEST TO DIFFERENTIATE **STAPHYLOCOCCI** FROM **MICROCOCCI**.

L23 ANSWER 111 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 52
AN 1987:168747 BIOSIS
TI COMPARISON OF METHODS FOR ROUTINE SEPARATION OF COAGULASE-NEGATIVE **STAPHYLOCOCCI** FROM **MICROCOCCI** ISOLATED FROM SHEEP.

L23 ANSWER 112 OF 280 MEDLINE
AN 87104076 MEDLINE
TI Comparison of methods for routine separation of coagulase-negative staphylococci from micrococci isolated from sheep.

L23 ANSWER 113 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 53
AN 1986:283577 BIOSIS
TI INHIBITION OF WALL AUTOLYSIS OF **STAPHYLOCOCCI** BY SODIUM POLYANETHOLE SULFONATE LIQUOID.

L23 ANSWER 114 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 54
AN 1986:458595 BIOSIS
TI RAPID SEPARATION AND QUANTITATION OF MIXED MICROORGANISMS BY FILTRATION AND BIOLUMINESCENCE.

L23 ANSWER 115 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1986:372248 BIOSIS
 TI ENHANCED PHAGOCYTOSIS OF BACTERIA BY HUMAN NEUTROPHILS FOLLOWING STIMULATION WITH GRANULOCYTE-MACROPHAGE COLONY STIMULATING FACTOR.

L23 ANSWER 116 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 55
 AN 1987:27757 BIOSIS
 TI EFFECT OF THE COMPOSITION OF REVERSION MEDIUM ON CHANGE OF **STAPHYLOCOCCUS-AUREUS** **LYSOSTAPHIN** PROTOPLASTS TO COCCAL FORMS AND L-FORMS.

L23 ANSWER 117 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 56
 AN 1986:238691 BIOSIS
 TI EVALUATION OF A RAPID TUBE **LYSOSTAPHIN** TEST TO DIFFERENTIATE BETWEEN **STAPHYLOCOCCI** AND MICROCOCCI.

L23 ANSWER 118 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.DUPLICATE 57
 AN 86065463 EMBASE
 TI The contribution of a capsule to survival of staphylococci within bovine neutrophils.

L23 ANSWER 119 OF 280 MEDLINE
 AN 86199323 MEDLINE
 TI Effect of the composition of the reversion medium on the transformation of coccal forms and L-form of **Staphylococcus aureus** **lysostaphin** protoplasts.

L23 ANSWER 120 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.DUPLICATE 58
 AN 85077656 EMBASE
 TI Adherence of lysostaphin to and penetration into human monocytes.

L23 ANSWER 121 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1985:422001 BIOSIS
 TI ANTAGONISTIC ACTIVITIES OF COAGULASE-POSITIVE **STAPHYLOCOCCI**.

L23 ANSWER 122 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 59
 AN 1986:214111 BIOSIS
 TI CELL FUSION BETWEEN L-FORMS AND PROTOPLASTS OF **STAPHYLOCOCCUS-AUREUS**.

L23 ANSWER 123 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 60
 AN 1985:298045 BIOSIS
 TI DECOMPLEMENTATION ANTIGEN A POSSIBLE DETERMINANT OF **STAPHYLOCOCCAL** PATHOGENICITY.

L23 ANSWER 124 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1986:166521 BIOSIS
 TI SPECIES DISTRIBUTION OF COAGULASE-NEGATIVE **STAPHYLOCOCCI** ISOLATED FROM CLINICAL SOURCES.

L23 ANSWER 125 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1985:417289 BIOSIS
 TI RAPID CLASSIFICATION OF **STAPHYLOCOCCI** BY USING **LYSOSTAPHIN** SENSITIVITY.

L23 ANSWER 126 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 61
 AN 1984:331781 BIOSIS
 TI INTRA LEUKOCYTIC SEQUESTRATION AS A CAUSE OF PERSISTENT **STAPHYLOCOCCUS-AUREUS** PERITONITIS IN CONTINUOUS AMBULATORY PERITONEAL DIALYSIS.

L23 ANSWER 127 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 62
 AN 1984:315916 BIOSIS
 TI COMPARISON OF VARIOUS METHODS FOR DIFFERENTIATION OF **STAPHYLOCOCCI** AND MICROCOCCI.

L23 ANSWER 128 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1984:172776 CAPLUS
 DN 100:172776
 TI Determination of phagocytosis of 32P-labeled Staphylococcus aureus by bovine polymorphonuclear leukocytes

L23 ANSWER 129 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 63
 AN 1984:290332 BIOSIS
 TI STAPHYLOCOCCI ISOLATED FROM ABSCESES IN SLAUGHTERED ANIMALS CHARACTERIZATION AND EPIDEMIOLOGICAL STUDIES.

L23 ANSWER 130 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1984:291850 BIOSIS
 TI FLUORESCENT STAINING OF INTRA CELLULAR AND EXTRACELLULAR BACTERIA IN BLOOD.

L23 ANSWER 131 OF 280 SCISEARCH COPYRIGHT 1999 ISI (R)
 AN 84:292621 SCISEARCH
 TI **LYSOSTAPHIN**-DISC-TEST FOR RAPID DIFFERENTIATION OF **STAPHYLOCOCCI** AND MICROCOCCI

L23 ANSWER 132 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 64
 AN 1984:109874 BIOSIS
 TI IMPROVEMENT IN THE LIPID EXTRACTION OF **STAPHYLOCOCCAL** CELLS BY **LYSOSTAPHIN** TREATMENT.

L23 ANSWER 133 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 65
 AN 1985:307468 BIOSIS
 TI A MODIFIED MEDIUM FOR THE RECOVERY OF STAPHYLOCOCCUS FROM WATER.

L23 ANSWER 134 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1984:114373 BIOSIS
 TI A COMPARATIVE STUDY OF METHODS USED FOR THE DIFFERENTIATION AND CHARACTERIZATION OF THE MICROCOCCACEAE.

L23 ANSWER 135 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1985:422018 BIOSIS
 TI COMPARATIVE STUDY OF 4 PROCEDURES FOR SEPARATING STAPHYLOCOCCI FROM MICROCOCCI.

L23 ANSWER 136 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.DUPLICATE 66
 AN 84035605 EMBASE
 TI Concurrent estimation of the kinetics of adhesion and ingestion of Staphylococcus aureus by human polymorphonuclear leukocytes (PMNs).

L23 ANSWER 137 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 67
 AN 1984:197346 BIOSIS
 TI FIBRONECTIN RECEPTORS FROM STAPHYLOCOCCUS-AUREUS.

L23 ANSWER 138 OF 280 MEDLINE
 AN 84067530 MEDLINE
 TI Induction of L-phase variant from protoplast of Staphylococcus aureus.

L23 ANSWER 139 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 68
 AN 1983:282097 BIOSIS
 TI ANTIBIOTIC ACTIVITY AGAINST INTRA LEUKOCYTIC STAPHYLOCOCCUS-AUREUS IN-VITRO AND IN EXPERIMENTAL MASTITIS IN MICE.

L23 ANSWER 140 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1984:48402 CAPLUS
 DN 100:48402
 TI Cationic polyelectrolytes activate autolytic wall enzymes in

- L23 ANSWER 141 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 69
AN 1984:308 BIOSIS
TI CLASSIFICATION AND **LYSOSTAPHIN** SUSCEPTIBILITY OF AIRBORNE
STAPHYLOCOCCI.
- L23 ANSWER 142 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
AN 83212247 EMBASE
TI [Serum antibody assay to cell wall of Staphylococcus aureus by a
hemagglutination test].
TITRAGE DES ANTICORPS SERIQUES ANTI-PEPTIDOGLYCANE PARIETAL DE
STAPHYLOCOCCUS AUREUS PAR HEMAGGLUTINATION INDIRECTE.
- L23 ANSWER 143 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V. DUPLICATE 70
AN 83208111 EMBASE
TI The influence of lysostaphin on phagocytosis, intracellular bactericidal
activity, and chemotaxis of human polymorphonuclear cells.
- L23 ANSWER 144 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1984:317913 BIOSIS
TI STAPHYLOCOCCAL LIPASE INTRA CELLULAR ENZYME PRODUCTION.
- L23 ANSWER 145 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 71
AN 1983:246438 BIOSIS
TI RAPID IDENTIFICATION OF STAPHYLOCOCCUS-AUREUS AND STREPTOCOCCUS-PNEUMONIAE
FROM BLOOD CULTURES.
- L23 ANSWER 146 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 72
AN 1982:275012 BIOSIS
TI FIBRONECTIN MEDIATES ATTACHMENT OF STAPHYLOCOCCUS-AUREUS TO HUMAN
NEUTROPHILS.
- L23 ANSWER 147 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1982:196440 CAPLUS
DN 96:196440
TI pH-dependent penicillin tolerance may protect intraleukocytic
Staphylococcus aureus from killing by cloxacillin
- L23 ANSWER 148 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 73
AN 1982:279693 BIOSIS
TI HIGH LEVEL POTENTIATION OF **LYSOSTAPHIN** ANTI
STAPHYLOCOCCAL ACTIVITY BY LYSOZYME.
- L23 ANSWER 149 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1983:160623 BIOSIS
TI THE USE OF LYSOSTAPHIN IN IN-VITRO ASSAYS OF PHAGOCYTE FUNCTION ADHERENCE
TO AND PENETRATION INTO GRANULOCYTES.
- L23 ANSWER 150 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1983:58533 BIOSIS
TI IMPROVED METHODOLOGY FOR DETERMINATION OF PHAGOCYTOSIS OF PHOSPHORUS-32
LABELED STAPHYLOCOCCUS-AUREUS BY POLYMORPHONUCLEAR LEUKOCYTES.
- L23 ANSWER 151 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 74
AN 1983:173412 BIOSIS
TI IDENTIFICATION OF STAPHYLOCOCCUS-STAPHYLOLYTICUS NRRL-B-2628 AS A BIOVAR
OF STAPHYLOCOCCUS-SIMULANS.
- L23 ANSWER 152 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 75
AN 1983:246419 BIOSIS
TI BIOLOGIC ACTIVITY OF CELL ASSOCIATED STAPHYLOCOCCAL ENTERO TOXIN A.

L23 ANSWER 153 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1983:119200 CAPLUS
DN 98:119200
TI The effect of minocycline and **lysostaphin** on the intracellular killing of **Staphylococcus aureus** by polymorphonuclear leukocytes

L23 ANSWER 154 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 76
AN 1981:289399 BIOSIS
TI **LYSOSTAPHIN** DISC TEST FOR ROUTINE PRESUMPTIVE IDENTIFICATION OF **STAPHYLOCOCCI**.

L23 ANSWER 155 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 77
AN 1982:150958 BIOSIS
TI SENSITIVITY TO **LYSOSTAPHIN** AS A CRITERION FOR IDENTIFICATION OF **STAPHYLOCOCCI** FROM ANIMAL ORIGIN.

L23 ANSWER 156 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 78
AN 1982:174713 BIOSIS
TI PROTEIN A ACTIVITY OF STAPHYLOCOCCUS-HYICUS IN COMPARISON TO PROTEIN A OF STAPHYLOCOCCUS-AUREUS.

L23 ANSWER 157 OF 280 MEDLINE
AN 82087003 MEDLINE
TI [Protein A-activity of Staphylococcus hyicus in comparison to protein A of Staphylococcus aureus (author's transl)].
Protein A-Aktivitat von Staphylococcus hyicus im Vergleich zu Protein A von Staphylococcus aureus.

L23 ANSWER 158 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1981:295943 BIOSIS
TI A POLYMORPHONUCLEAR LEUKOCYTE MONO LAYER SYSTEM FOR STUDIES OF PHAGOCYTOSIS.

L23 ANSWER 159 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1981:232864 BIOSIS
TI ENDOGENOUS PYROGEN PRODUCTION BY HUMAN BLOOD MONOCYTES STIMULATED BY STAPHYLOCOCCAL CELL WALL COMPONENTS.

L23 ANSWER 160 OF 280 MEDLINE
AN 82172614 MEDLINE
TI [Sensitivity to **lysostaphin** lysis of **staphylococci** isolated from ovine mastitic milk].
Sensibilidad a la lisis por lisostafina en estafilococos aislados de leche mamitica de oveja.

L23 ANSWER 161 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1980:67565 BIOSIS
TI CHARACTERISTICS OF COAGULASE NEGATIVE STAPHYLOCOCCI ISOLATED FROM MARROW TRANSPLANT PATIENTS.

L23 ANSWER 162 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1980:57229 BIOSIS
TI EVALUATION OF 6 CORRELATES OF THE COAGULASE TEST FOR IDENTIFYING STAPHYLOCOCCUS-AUREUS.

L23 ANSWER 163 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1980:211630 CAPLUS
DN 92:211630
TI Recombinant plasmids carrying promoters, genes and the origin of DNA replication of the early region of bacteriophage T7

L23 ANSWER 164 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 79

AN 1981:190011 BIOSIS
 TI MONOCYTES IN INFLAMMATORY BOWEL DISEASE PHAGOCYTOSIS AND INTRA CELLULAR KILLING.

L23 ANSWER 165 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 80
 AN 1981:140921 BIOSIS
 TI FACILE PENETRATION OF THE **STAPHYLOCOCCUS-AUREUS** CAPSULE BY **LYSOSTAPHIN**.

L23 ANSWER 166 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1980:251516 BIOSIS
 TI ANTIBODY INHIBITION OF POLYMORPHONUCLEAR PHAGOCYTOSIS DISSOCIATION OF BACTERIAL ATTACHMENT AND BACTERIAL KILLING.

L23 ANSWER 167 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 81
 AN 1981:169147 BIOSIS
 TI RAPID IDENTIFICATION OF **STAPHYLOCOCCUS-AUREUS** BY USING **LYSOSTAPHIN** SENSITIVITY.

L23 ANSWER 168 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 82
 AN 1981:16018 BIOSIS
 TI EFFECT OF VARIOUS BLOOD CULTURE MEDIA ON **LYSOSTAPHIN** SENSITIVITY OF **STAPHYLOCOCCI**.

L23 ANSWER 169 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1980:238746 BIOSIS
 TI CHARACTERIZATION OF **STAPHYLOCOCCI** ISOLATED FROM MASTITIC COWS IN SPAIN.

L23 ANSWER 170 OF 280 MEDLINE
 AN 81071179 MEDLINE
 TI The characteristics of extracellular protein secretion by *Staphylococcus staphylolyticus*.

L23 ANSWER 171 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1981:47851 BIOSIS
 TI ANTIBODY INHIBITION OF POLYMORPHONUCLEAR PHAGOCYTOSIS DISSOCIATION OF BACTERIAL ATTACHMENT AND BACTERIAL KILLING.

L23 ANSWER 172 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
 AN 80197299 EMBASE
 TI Involvement of the cell envelope in plasmid maintenance: plasmid curing during the regeneration of protoplasts.

L23 ANSWER 173 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 83
 AN 1981:151915 BIOSIS
 TI METHOD TO PROVE INGESTION OF PARTICLES BY MACROPHAGES WITH LIGHT MICROSCOPY.

L23 ANSWER 174 OF 280 MEDLINE
 AN 81126174 MEDLINE
 TI Method to prove investigation of particles by macrophages with light microscopy.

L23 ANSWER 175 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 84
 AN 1981:294063 BIOSIS
 TI SELECTION IN-VITRO OF ANTIBIOTICS WITH ACTIVITY AGAINST INTRA CELLULAR **STAPHYLOCOCCUS-AUREUS**.

L23 ANSWER 176 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 85
 AN 1981:131177 BIOSIS
 TI THE EFFECTS OF CLOXACILLIN ON **STAPHYLOCOCCI STAPHYLOCOCCUS-AUREUS** PHAGOCYTOSED BY BOVINE NEUTROPHILS.

L23 ANSWER 177 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1980:5431 BIOSIS
TI CELL WALL PROTEIN OF **STAPHYLOCOCCUS-AUREUS** A KINETIC STUDY OF RELEASE BY **LYSOSTAPHIN**.

L23 ANSWER 178 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 86
AN 1979:228510 BIOSIS
TI RELATIONSHIP BETWEEN **LYSOSTAPHIN** ENDO PEPTIDASE PRODUCTION AND CELL WALL COMPOSITION IN **STAPHYLOCOCCUS-STAPHYLOLYTICUS**.

L23 ANSWER 179 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 87
AN 1980:119320 BIOSIS
TI RAPID SCREENING TEST FOR **STAPHYLOCOCCUS-AUREUS** USING **LYSOSTAPHIN**.

L23 ANSWER 180 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1980:47072 BIOSIS
TI PHAGOCYTIC POTENTIAL OF HAIRY CELLS.

L23 ANSWER 181 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1980:48569 BIOSIS
TI NORMAL NEUTROPHIL PHAGOCYTIC AND BACTERICIDAL ACTIVITY IN EXPERIMENTAL NUTRITIONAL IRON DEFICIENCY.

L23 ANSWER 182 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 88
AN 1980:149352 BIOSIS
TI PHAGOCYTIC POTENTIAL OF HAIRY CELLS.

L23 ANSWER 183 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 89
AN 1979:252617 BIOSIS
TI HAIRY CELL LEUKEMIA A BONE MARROW DERIVED CELL LYMPHOCYTIC DISORDER.

L23 ANSWER 184 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.DUPLICATE 90
AN 79175285 EMBASE
TI Evaluation of the **lysostaphin**-susceptibility test for the classification of **staphylococci**.

L23 ANSWER 185 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1979:89585 BIOSIS
TI AGE RELATED CHANGES IN PULMONARY MACROPHAGES.

L23 ANSWER 186 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 91
AN 1979:155938 BIOSIS
TI COUNTER IMMUNO ELECTROPHORETIC DETECTION OF A HIGH INCIDENCE OF PRECIPITIN REACTIONS IN NORMAL HUMAN SERA AGAINST **STAPHYLOCOCCAL** TEICHOIC ACIDS AND PROTEIN A.

L23 ANSWER 187 OF 280 MEDLINE DUPLICATE 92
AN 79164149 MEDLINE
TI Cell-wall proteins of **Staphylococcus aureus** : a kinetic study of release by **lysostaphin**.

L23 ANSWER 188 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 93
AN 1979:155910 BIOSIS
TI USE OF **LYSOSTAPHIN** TO REMOVE CELL ADHERENT **STAPHYLOCOCCI** DURING IN-VITRO ASSAYS OF PHAGOCYTE FUNCTION.

L23 ANSWER 189 OF 280 SCISEARCH COPYRIGHT 1999 ISI (R)
AN 78:236709 SCISEARCH
TI USE OF **LYSOSTAPHIN** TO REMOVE CELL-ADHERENT **STAPHYLOCOCCI** DURING INVITRO ASSAYS OF PHAGOCYTE FUNCTION

L23 ANSWER 190 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1979:252140 BIOSIS
 TI EVALUATION OF THE **LYSOSTAPHIN** SUSCEPTIBILITY TEST FOR THE CLASSIFICATION OF **STAPHYLOCOCCI**.

L23 ANSWER 191 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1978:100654 BIOSIS
 TI USE OF **LYSOSTAPHIN** TO REMOVE CELL ADHERENT **STAPHYLOCOCCI** DURING IN-VITRO ASSAYS OF PHAGOCYTE FUNCTION.

L23 ANSWER 192 OF 280 MEDLINE
 AN 78041466 MEDLINE
 TI Comparison of fatty acid composition of stable L-phase variants of *Staphylococcus aureus* induced by three different mechanisms.

L23 ANSWER 193 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1977:418924 CAPLUS
 DN 87:18924
 TI Gentle lysis of *Staphylococcus aureus* at low temperature

L23 ANSWER 194 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 94
 AN 1977:224543 BIOSIS
 TI RAPID SOLID PHASE RADIOASSAY FOR *STAPHYLOCOCCAL* PROTEIN A.

L23 ANSWER 195 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1977:498718 CAPLUS
 DN 87:98718
 TI Coagulase-negative staphylococci

L23 ANSWER 196 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1977:174210 BIOSIS
 TI KINETICS OF *STAPHYLOCOCCAL* OPSONIZATION ATTACHMENT INGESTION AND KILLING BY HUMAN POLYMORPHONUCLEAR LEUKOCYTES A QUANTITATIVE ASSAY USING TRITIATED THYMIDINE LABELED BACTERIA.

L23 ANSWER 197 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1978:142383 BIOSIS
 TI **LYSOSTAPHIN** ENDO PEPTIDASE CATALYZED TRANS PEPTIDATION REACTIONS OF THE IMINO TRANSFER TYPE.

L23 ANSWER 198 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 95
 AN 1977:223414 BIOSIS
 TI EVALUATION OF PHAGOCYTOSIS OF **STAPHYLOCOCCUS-AUREUS** WITH THE AID OF **LYSOSTAPHIN**.

L23 ANSWER 199 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1978:71625 BIOSIS
 TI CELL WALL COMPOSITION AND **LYSOSTAPHIN** ENDO PEPTIDASE RESISTANCE IN **STAPHYLOCOCCUS-STAPHYLOLYTICUS**.

L23 ANSWER 200 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.DUPLICATE 96
 AN 77166192 EMBASE
 TI The occurrence of cell associated enterotoxin B in *Staphylococcus aureus*.

L23 ANSWER 201 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1977:66529 CAPLUS
 DN 86:66529
 TI Inhibition of leukocyte migration by peptidoglycan fragments

L23 ANSWER 202 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
 AN 77097184 EMBASE
 TI The rate of phagocytosis and killing of staphylococci in the murine lung.

L23 ANSWER 203 OF 280 MEDLINE

AN 77114939 MEDICINE
 TI The identification of staphylococci in clinical food microbiology laboratories.

L23 ANSWER 204 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
 AN 77192012 EMBASE
 TI Susceptibility of **staphylococci** of various cell wall structures to **lysostaphin** and its separated enzymes.

L23 ANSWER 205 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1977:84175 CAPLUS
 DN 86:84175
 TI Susceptibility of **staphylococci** of various cell wall structure to **lysostaphin** and its separated enzymes

L23 ANSWER 206 OF 280 SCISEARCH COPYRIGHT 1999 ISI (R)
 AN 77:62835 SCISEARCH
 TI SUSCEPTIBILITY OF **STAPHYLOCOCCI** OF VARIOUS CELL-WALL STRUCTURE TO **LYSOSTAPHIN** AND ITS SEPARATED ENZYMES

L23 ANSWER 207 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
 AN 77097391 EMBASE
 TI Effect of in vitro exposure to ethanol on the antibacterial activity of alveolar macrophages in pulmonary lavage fluid.

L23 ANSWER 208 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 97
 AN 1976:185044 BIOSIS
 TI MEASUREMENT OF PHAGOCYTOSIS OF PHOSPHORUS-32 LABELED **STAPHYLOCOCCUS-AUREUS** BY BOVINE LEUKOCYTES **LYSOSTAPHIN** DIGESTION AND INHIBITORY EFFECT OF CREAM.

L23 ANSWER 209 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 98
 AN 1976:154005 BIOSIS
 TI INHIBITION BY GLUTARALDEHYDE OF **LYSOSTAPHIN** INDUCED LYSIS OF **STAPHYLOCOCCUS-AUREUS**.

L23 ANSWER 210 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1975:147241 BIOSIS
 TI DENSITY GRADIENT SEPARATION OF LYMPHOID CELLS ADHERING TO PROTEIN A CONTAINING STAPHYLOCOCCI.

L23 ANSWER 211 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
 AN 75047208 EMBASE
 TI The role of peroxidase in the bactericidal activity of human blood eosinophils.

L23 ANSWER 212 OF 280 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.DUPLICATE 99
 AN 75037313 EMBASE
 TI Lack of correlation between methicillin resistance and susceptibility to **lysostaphin** in **Staphylococcus aureus**.

L23 ANSWER 213 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 100
 AN 1975:1172 BIOSIS
 TI SYSTEMIC **LYSOSTAPHIN** IN MAN APPARENT ANTI **MICROBIAL** ACTIVITY IN A NEUTROPENIC PATIENT.

L23 ANSWER 214 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1974:566102 CAPLUS
 DN 81:166102
 TI Amino acid transport and staphylococcal membrane vesicles

L23 ANSWER 215 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1974:159590 BIOSIS

TI INTERACTION OF **STAPHYLOCOCCUS** LEUKOCYTIC BACTERIA AND ANTIBIOTICS.

L23 ANSWER 216 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1974:11679 CAPLUS
 DN 80:11679
 TI Lysostaphin. Separation and characterization of three enzymes

L23 ANSWER 217 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 101
 AN 1974:164644 BIOSIS
 TI SUSCEPTIBILITY OF **STAPHYLOCOCCUS**-EPIDERMIDIS TO
LYSOSTAPHIN AND MAJOR ANTI **MICROBIAL** AGENTS.

L23 ANSWER 218 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1974:402168 CAPLUS
 DN 81:2168
 TI Structure and immunology of protein A

L23 ANSWER 219 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1973:234741 BIOSIS
 TI CULTURAL PHAGOCYTIC AND BACTERICIDAL CHARACTERISTICS OF PERITONEAL
 MACROPHAGES.

L23 ANSWER 220 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1973:98797 BIOSIS
 TI L FORMS.

L23 ANSWER 221 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1974:518533 CAPLUS
 DN 81:118533
 TI Lysostaphin by fermentation

L23 ANSWER 222 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 102
 AN 1973:139621 BIOSIS
 TI PROTEIN A ISOLATED FROM **STAPHYLOCOCCUS**-AUREUS AFTER DIGESTION
 WITH **LYSOSTAPHIN**.

L23 ANSWER 223 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 103
 AN 1973:161704 BIOSIS
 TI BINDING SITES FOR CATIONIC PROTEINS ON **STAPHYLOCOCCI**.

L23 ANSWER 224 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1973:414468 CAPLUS
 DN 79:14468
 TI Lysostaphin. Model for a specific enzymic approach to infectious disease

L23 ANSWER 225 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1973:156024 BIOSIS
 TI LOCALIZATION OF PROTEIN A IN THE BACTERIA.

L23 ANSWER 226 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1971:497260 CAPLUS
 DN 75:97260
 TI Lysostaphin fermentation with accelerated time cycle

L23 ANSWER 227 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 104
 AN 1971:204344 BIOSIS
 TI NUCLEASE PRODUCTION AND **LYSOSTAPHIN** SUSCEPTIBILITY OF
STAPHYLOCOCCUS-AUREUS AND OTHER CATALASE POSITIVE COCCI.

L23 ANSWER 228 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 105
 AN 1972:118261 BIOSIS
 TI EFFICACY AND SAFETY OF TOPICAL **LYSOSTAPHIN** TREATMENT OF
 PERSISTENT NASAL CARRIAGE OF **STAPHYLOCOCCUS**-AUREUS.

L23 ANSWER 229 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1971:95938 CAPLUS
 DN 74:95938
 TI Cycloserine induction, propagation, and antimicrobial susceptibility of wall-defective Staphylococcus aureus

L23 ANSWER 230 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1971:515798 CAPLUS
 DN 75:115798
 TI Modified assay of neutrophil function. Use of lysostaphin to differentiate defective phagocytosis from impaired intracellular killing

L23 ANSWER 231 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 106
 AN 1971:199731 BIOSIS
 TI STUDIES ON ENDO BETA-N ACETYL GLUCOSAMINIDASE STAPHYLOLYTIC PEPTIDASE AND N ACETYLMURAMYL L ALANINE AMIDASE IN **LYSOSTAPHIN** AND FROM **STAPHYLOCOCCUS-AUREUS**.

L23 ANSWER 232 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1971:495754 CAPLUS
 DN 75:95754
 TI Autolytic activity in methicillin-resistant Staphylococcus aureus

L23 ANSWER 233 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1971:83621 BIOSIS
 TI BACTERIO PHAGE REPRODUCTION IN **LYSOSTAPHIN** TREATED **STAPHYLOCOCCUS-AUREUS** 44-A-HJD.

L23 ANSWER 234 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1972:191909 BIOSIS
 TI ENDOGENOUS RESERVE OF STAPHYLOCOCCI.

L23 ANSWER 235 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1972:174588 BIOSIS
 TI LYSIS AND LYSATES STUDY WITH STAPHYLOCOCCI.

L23 ANSWER 236 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 107
 AN 1971:207550 BIOSIS
 TI LIGHT MICROSCOPY AND SCANNING BEAM ELECTRON MICROSCOPY OF WALL DEFECTIVE **STAPHYLOCOCCUS-AUREUS** INDUCED BY **LYSOSTAPHIN**.

L23 ANSWER 237 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 108
 AN 1971:111924 BIOSIS
 TI MOLECULAR PROPERTIES OF **LYSOSTAPHIN** A BACTERIOLYTIC AGENT SPECIFIC FOR **STAPHYLOCOCCUS-AUREUS**.

L23 ANSWER 238 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1971:30379 BIOSIS
 TI LIGHT MICROSCOPE AND SCANNING BEAM ELECTRON MICROSCOPY OF WALL DEFECTIVE **STAPHYLOCOCCUS-AUREUS** INDUCED BY **LYSOSTAPHIN**.

L23 ANSWER 239 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1970:52190 CAPLUS
 DN 72:52190
 TI Effects of lysostaphin and its two active components on stable wall-defective forms of Staphylococcus aureus

L23 ANSWER 240 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1970:516447 CAPLUS
 DN 73:116447
 TI Characterization of a Staphylococcus aureus bacteriocin

L23 ANSWER 241 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 109
 AN 1970:198517 BIOSIS
 TI **LYSOSTAPHIN** INDUCED OSMOTICALLY FRAGILE **STAPHYLOCOCCUS**
 -AUREUS CELLS.

L23 ANSWER 242 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1971:431837 CAPLUS
 DN 75:31837
 TI Cell walls of methicillin-resistant *Staphylococcus aureus*

L23 ANSWER 243 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 110
 AN 1969:121678 BIOSIS
 TI INST ELECTRON MICROSCOPY AND VIABILITY OF ENZ **LYSOSTAPHIN** ANTI
 INFECT INDUCED **STAPHYLOCOCCAL** SPHEROPLASTS PROTOPLAST-LIKE
 BODIES AND PROTOPLASTS **STAPHYLOCOCCUS-AUREUS**.

L23 ANSWER 244 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1970:97622 CAPLUS
 DN 72:97622
 TI *Staphylococcal* spheroplasts and L colonies. IV. **Antimicrobial**
 susceptibility of stable methicillin-induced and **lysostaphin**
 -induced spheroplasts

L23 ANSWER 245 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1969:59021 BIOSIS
 TI TREATMENT OF CANINE **STAPHYLOCOCCAL** ENDO CARDITIS WITH ENZ
LYSOSTAPHIN ANTI INFECT OR OXACILLIN ANTI INFECT.

L23 ANSWER 246 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 111
 AN 1971:2741 BIOSIS
 TI THE USE OF **LYSOSTAPHIN** IN TREATMENT OF **STAPHYLOCOCCAL**
 WOUND INFECTIONS.

L23 ANSWER 247 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 112
 AN 1969:155552 BIOSIS
 TI **STAPHYLOCOCCAL** SPHEROPLASTS AND L COLONIES III INDUCTION BY ENZ
LYSOSTAPHIN **STAPHYLOCOCCUS-AUREUS**.

L23 ANSWER 248 OF 280 MEDLINE DUPLICATE 113
 AN 69137459 MEDLINE
 TI *Staphylococcus aureus* response to **lysostaphin** in some
 fermented foods.

L23 ANSWER 249 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1969:139395 BIOSIS
 TI **STAPHYLOCOCCUS-AUREUS** RESPONSE TO ENZ **LYSOSTAPHIN**
 DISINFECT IN SOME FERMENTED FOODS CHEESE SAUSAGE.

L23 ANSWER 250 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 114
 AN 1969:132965 BIOSIS
 TI TRANSFECTION OF ENZ **LYSOSTAPHIN** ANTI INFECT TREATED CELLS OF
STAPHYLOCOCCUS-AUREUS **STAPHYLOCOCCAL** PHAGES 53 44A.

L23 ANSWER 251 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1968:495105 CAPLUS
 DN 69:95105
 TI *Lysostaphin* production by fermentation

L23 ANSWER 252 OF 280 MEDLINE DUPLICATE 115
 AN 68406273 MEDLINE
 TI Comparative inhibition of methicillin-resistant strains of
Staphylococcus aureus by **lysostaphin** and other
 antibiotics.

L23 ANSWER 253 OF MEDLINE DUPLICATE 116
AN 68406272 MEDLINE
TI Susceptibility of coagulase-negative **staphylococci** to **lysostaphin** and other antibiotics.

L23 ANSWER 254 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1968:75873 CAPLUS
DN 68:75873
TI Use of **lysostaphin** in the isolation of highly polymerized, deoxyribonucleic acid and in the taxonomy of aerobic Micrococcaceae

L23 ANSWER 255 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 117
AN 1969:218124 BIOSIS
TI OSMOTIC FRAGILITY AND VIABILITY OF ENZ **LYSOSTAPHIN** ANTI INFECT INDUCED **STAPHYLOCOCCAL** SPHEROPLASTS **STAPHYLOCOCCUS** -AUREUS.

L23 ANSWER 256 OF 280 MEDLINE
AN 70001548 MEDLINE
TI **Staphylococcal** spheroplasts and L colonies. IV. **Antimicrobial** susceptibility of stable methicillin-induced and **lysostaphin** -induced spheroplasts.

L23 ANSWER 257 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1969:116858 BIOSIS
TI IN-VITRO ACTIVITY OF ENZ **LYSOSTAPHIN** ANTI INFECT BIOASSAY IN SERUM USING **STAPHYLOCOCCUS**-AUREUS DOG.

L23 ANSWER 258 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 118
AN 1969:99990 BIOSIS
TI ENZ **LYSOSTAPHIN** AN ENZYMATIC APPROACH TO **STAPHYLOCOCCAL** DISEASE III COMBINED ENZ **LYSOSTAPHIN** ANTI INFECT METHICILLIN ANTI INFECT THERAPY OF ESTABLISHED **STAPHYLOCOCCAL** ABSCESES IN MICE RENAL.

L23 ANSWER 259 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1968:425281 CAPLUS
DN 69:25281
TI **Lysostaphin**. II. Sensitivity of 230 **Staphylococcus aureus** strains of animal origin to **lysostaphin** ✓

L23 ANSWER 260 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1968:425280 CAPLUS
DN 69:25280
TI **Lysostaphin**. I. Sensitivity of 355 **Staphylococcus aureus** strains of human origin to **lysostaphin** ✓

L23 ANSWER 261 OF 280 MEDLINE DUPLICATE 119
AN 67217944 MEDLINE
TI Lytic action of **lysostaphin** on susceptible and resistant strains of **Staphylococcus aureus**.

L23 ANSWER 262 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1967:63805 CAPLUS
DN 66:63805
TI Immunologically active cell wall peptide polymer of **Staphylococcus aureus**

L23 ANSWER 263 OF 280 CAPLUS COPYRIGHT 1999 ACS
AN 1967:45319 CAPLUS
DN 66:45319
TI **Lysostaphin** in experimental renal infections

DUPLICATE 120

L23 ANSWER 264 OF 280 MEDLINE
 AN 67205710 MEDLINE
 TI **Lysostaphin**: an enzymatic approach to **staphylococcal** disease. II. In vivo studies.

DUPLICATE 121

L23 ANSWER 265 OF 280 MEDLINE
 AN 67263769 MEDLINE
 TI **Lysostaphin**: an enzymatic approach to **staphylococcal** disease. I. In vitro studies.

L23 ANSWER 266 OF 280 MEDLINE
 AN 68368241 MEDLINE
 TI Effect of **lysostaphin** on **staphylococcal** carriage in infants and children.

L23 ANSWER 267 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1967:36424 CAPLUS
 DN 66:36424
 TI Therapeutic activity of **lysostaphin** in experimental **staphylococcal** infections

L23 ANSWER 268 OF 280 MEDLINE
 AN 68368299 MEDLINE
 TI Studies in experimental **staphylococcal** endocarditis in dogs. VI. Treatment with **lysostaphin**.

L23 ANSWER 269 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1967:452667 CAPLUS
 DN 67:52667
 TI Selective activity of **lysostaphin** in vivo

L23 ANSWER 270 OF 280 MEDLINE
 AN 67081173 MEDLINE
 TI **Staphylococcal** strains with relation to **lysostaphin** sensistivity.

L23 ANSWER 271 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1967:479901 CAPLUS
 DN 67:79901
 TI In vitro activity of **lysostaphin**

L23 ANSWER 272 OF 280 MEDLINE
 AN 67055171 MEDLINE
 TI Growth inhibition of unusual strains of **Staphylococcus aureus** by **lysostaphin** and other antistaphylococcal antibiotics.

L23 ANSWER 273 OF 280 MEDLINE
 AN 67042251 MEDLINE
 TI In vitro effect of **lysostaphin**, neomycin, and bacitracin on **Staphylococcus aureus**.

L23 ANSWER 274 OF 280 CAPLUS COPYRIGHT 1999 ACS
 AN 1967:420242 CAPLUS
 DN 67:20242
 TI Experimental observations on staphylococcal disease

L23 ANSWER 275 OF 280 MEDLINE
 AN 66113613 MEDLINE
 TI The role of NaCl in the lysis of **Staphylococcus aureus** by **lysostaphin**.

L23 ANSWER 276 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1996:218739 BIOSIS

TI Safety assessment of genetically modified microorganisms applied in meat fermentations.

L23 ANSWER 277 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1978:78502 BIOSIS
TI EFFECT OF **LYSOSTAPHIN** ENDO PEPTIDASE PRODUCTION ON THE CELL WALL OF **STAPHYLOCOCCUS-STAPHYLOLYTICUS**.

L23 ANSWER 278 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1978:77936 BIOSIS
TI COMPARATIVE EFFECTS OF POLYENE ANTIBIOTICS ON RABBIT ALVEOLAR MACROPHAGES IN-VITRO.

L23 ANSWER 279 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1969:27404 BIOSIS
TI STUDIES IN EXPERIMENTAL **STAPHYLOCOCCAL** ENDO CARDITIS IN DOGS VI TREATMENT WITH ENZ **LYSOSTAPHIN** ANTI INFECT.

L23 ANSWER 280 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1969:27414 BIOSIS
TI EFFECT OF ENZ **LYSOSTAPHIN** ANTI INFECT ON **STAPHYLOCOCCAL** CARRIAGE IN INFANTS AND CHILDREN **STAPHYLOCOCCUS-AUREUS** ANTIBODY FORMATION PASSIVE CUTANEOUS SENSITIVITY.

US Pat

02/08/99

M.BORIN

Page 1

(FILE 'USPATFULL, WPIDS, BIOSIS, EMBASE, MEDLINE, CAPLUS, SCISEARCH, INVESTEXT, DRUGU' ENTERED AT 11:11:15 ON 08 FEB 1999)

L13 17 FILE USPATFULL
L14 12 FILE WPIDS
L15 162 FILE BIOSIS
L16 83 FILE EMBASE
L17 117 FILE MEDLINE
L18 137 FILE CAPLUS
L19 65 FILE SCISEARCH
L20 0 FILE INVESTEXT
L21 6 FILE DRUGU

TOTAL FOR ALL FILES

L22 599 S LYSOSTAPHIN (10A) (ANTIMICROB#### OR MICROB### OR STAPHYLOCOC
L23 280 DUPLICATE REMOVE L15-L19 (284 DUPLICATES REMOVED)

=> d l13 pi,bib, kwic 1-17

L13 ANSWER 1 OF 17 USPATFULL

PI US 5858962 990112

AN 1999:4620 USPATFULL

TI Composition for treating mastitis and other staphylococcal infections

IN Blackburn, Peter, New York, NY, United States

Polak, June, Brooklyn, NY, United States

PA Ambi Inc., Tarrytown, NY, United States (U.S. corporation)

PI US 5858962 990112

AI US 93-168687 931216 (8)

RLI Continuation of Ser. No. US 89-440092, filed on 22 Nov 1989, now
abandoned which is a continuation of Ser. No. US 88-188183, filed on 28
Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US
87-48412, filed on 11 May 1987, now abandoned

DT Utility

EXNAM Primary Examiner: Weddington, Kevin E.

LREP White & Case L.L.P.

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 733

AB **Lysostaphin** is used to eliminate and cure
staphylococcal infections including the cure of mastitis by
intramammary infusion. Administration of from 2 mg to 400 mg of
lysostaphin to an infected bovine mammary gland eliminates
staphylococci, and the reoccurrence common with antibiotic
therapy is not observed. Teat-dips containing lysostaphin, mutanolysin
and lysozyme can be used as. . .

SUMM This application relates to the use of **lysostaphin** in the
treatment and prevention of **staphylococcal** infection and, in
particular, to the treatment and prevention of staphylococcal bovine

09/120030

mastitis.

SUMM **Lysostaphin** is a bacteriocin secreted by a single known strain of **Staphylococcus simulans** originally isolated and named **Staphylococcus staphylolyticus** by Schindler and Schuhardt. The production of **lysostaphin** by **S. staphylolyticus** has been described previously in U.S. Pat. No. 3,278,378 issued Oct. 11, 1966 and in Proceedings of. . .

SUMM Bacteriocins are proteins secreted by bacteria that kill and sometimes lyse related bacteria. For example, **lysostaphin** lyses and kills practically all known **staphylococcal** species but is inactive against bacteria of all other genera. **Lysostaphin**, isolated from culture filtrates of **S. simulans** (NRRL B-2628) grown according to published references, is an endopeptidase which cleaves the polyglycine cross-links of the peptidoglycan found in the cell walls of **staphylococci**. In addition, cultures that produce **lysostaphin** appear to be resistant to its activities while cultures grown under non-**lysostaphin** producing conditions are sensitive.

SUMM Studies on the possible mechanism of antibiotic evasion of phagocytized **staphylococci** in mastitis treatment show that **lysostaphin** had been rejected as a candidate for destroying phagocytized **staphylococci**. Craven et al., 29 Research in Veterinary Science 57 (1980); Craven et al., 21 Antimicrobial Agents and Chemotherapy 618 (1982);. . . Comp. Immun. Microbial. Infect. Dis. 447 (1982)) Craven et al., 51 Journal of Dairy Research 513 (1984). In these experiments **lysostaphin** was used in vitro as a pretreatment to destroy extracellular **staphylococci** prior to exposing the phagocytized **staphylococci** to cloxacillin, gentamicin or **lysostaphin**. Craven et al.'s results strongly suggest that **lysostaphin** would have no effect on mastitis since intracellular **staphylococci** were still viable after 20 hours of incubation in a **lysostaphin** containing solution. 51 Journal of Dairy Research at 515-516, and Table 2.

SUMM . . . of chronic nasal staphylococcal infections (Quickel, Jr. et al., 22 Applied Microbiology 446 (1971)). In one case of a resistant **staphylococcal** infection, **lysostaphin** was given systemically (Stark et al., 291 Medical Intelligence 239 (1974)). In general, however, there has been great skepticism and. . .

SUMM . . . amount of **lysostaphin**, with or without surfactant, EDTA, penicillin or other potentiating agents, are used to achieve elimination of the **staphylococcal** infection. Preferably such infusions contain between 2 to 400 mg **lysostaphin** when no potentiating agents are present. In combinations containing potentiating agents, the required effective doses of **lysostaphin** can be lowered. . .

SUMM . . . by conventional antibiotic (e.g. penicillin) therapy. In addition, penicillin and other similar acting substances may also be useful together with **lysostaphin** as an agent against **staphylococcal** infection and contamination.

DETD . . . strain 00 containing a recombinant plasmid which directs the synthesis of **lysostaphin**, as this provides for both high levels of **lysostaphin** production substantially free from **staphylococcal** immunogenic contaminants and facile **lysostaphin** purification since the **lysostaphin** accumulates directly in the growth medium. **Bacillus sphaericus** transformants containing the plasmid pBC16-1L have been found to be particularly suited. . .

DETD . . . developed either chronic or acute staphylococcal bovine mastitis despite prophylactic treatment. A single dose of from 2 to 400 mg **lysostaphin** per milk gland will eliminate the infection and cure **staphylococcal** mastitis in most instances. Additional doses of **lysostaphin** may be indicated where the infection is persistent. Doses significantly higher than 400 mg are not recommended as they can. . .

DETD Table IC demonstrates the synergistic effect of **lysostaphin**

/penicillin combinations on three strains of **staphylococcus**.
Depending on the doses of each, the combination of **lysostaphin**
plus penicillin can be 100 to 1000 times more effective than either
lysostaphin or penicillin alone with all three strains.

DETD

TABLE ID

A Comparison of the Effect of the Combination of
Lysostaphin and Penicillin Versus Their Sequential
Effects on the Survival of **Staphylococcus aureus**
(Strain RN451) in milk at 37.degree. C.

	Pen(2h)/ lspn(2h)/		pen(2h) lspn(0.5h) pen(0.5h)	
combo(2h) lspn(2h)				
% survival	0.0005	23	25	0.3 10

DETD . . . **lysostaphin** which were sufficient to eliminate the infection
did not produce adverse side effects and indicated that intramammary
infusions of **lysostaphin** are effective against
staphylococcal mastitis. At 125 .mu.g/kg, glands were cleared of
infection by the 6 hour post-treatment sample and remained clear
throughout the . . .

DETD

TABLE IV

Efficacy of Intramammary Infusion of **Lysostaphin** Toward
Experimental **STAPHYLOCOCCAL** Mastitis in Guinea Pig

	Lysostaphin Dose .mu.g/kg				
	ZERO	1.0	5.0	25.0	62.5 125.0
Number of animals	(0/10)	(1/0)	(1/2)	(2/2) (1/1)	(7/7)

cleared of
infection

DETD It can be seen from these examples that **lysostaphin** is
effective for treatment of **staphylococcal** mastitis and that
its effect is greatly enhanced when used in combination with penicillin
or with substances such as mild. . .

CLM

What is claimed is:

1. A composition for killing **staphylococci** comprising
lysostaphin and an agent which synergistically enhances the
bactericidal activity of the **lysostaphin**, and which is in an amount
effective to produce the synergistic enhancement, selected from the
group consisting of penicillin, bacitracin, methicillin, cephalosporin
and polymyxin and wherein the **lysostaphin** and the agent are
together in amounts effective to kill **staphylococci**.

2. A composition for killing **staphylococci** comprising
lysostaphin and at least one agent which synergistically
enhances the bactericidal activity of the **lysostaphin**, and which is in
an amount. . .

L13 ANSWER 2 OF 17 USPATFULL
PI US 5776712 980707

09/120030

AN 1998:78961 USPTFLL
 TI Methods and materials for the detection of *Staphylococcus aureus*
 IN Kuusela, Pentti, Helsinki, Finland
 Hilden, Pekka, Helsinki, Finland
 PA Helsinki University Licensing, Ltd., Helsinki, Finland (non-U.S. corporation)
 PI US 5776712 980707
 AI US 96-610389 960304 (8)
 RLI Continuation-in-part of Ser. No. US 93-169524, filed on 17 Dec 1993, now patented, Pat. No. US 5496706
 DT Utility
 EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Shaver, Jennifer
 LREP Marshall, O'Toole, Gerstein, Murray & Borun
 CLMN Number of Claims: 10
 ECL Exemplary Claim: 1
 DRWN 4 Drawing Figure(s); 3 Drawing Page(s)
 LN.CNT 910
 SUMM The present invention provides an approximately 230 kDa protein, designated MRSA-230, which is isolated from **lysostaphin** digests of methicillin-resistant **Staphylococcus aureus** which test negative in standard *S. aureus* agglutination assays. Thus, the invention includes a purified and isolated MRSA-230 protein.
 SUMM A preferred biological sample from which to purify MRSA-230 protein or fragments is derived from a **lysostaphin** digest of **Staphylococcus aureus**. **Lysostaphin** is an enzyme known to specifically cleave the pentaglycine bridge which cross-links *S. aureus* surface proteins to the *S. aureus*.
 DETD **Lysostaphin** digests of non-agglutinating, methicillin-resistant *S. aureus* were conducted. **Staphylococci** grown in 1 liter Todd-Hewitt medium were suspended in 20 ml NaCl/P.sub.i (0.5M sodium phosphate, pH 7.4, 0.14M sodium chloride).
 L13 ANSWER 3 OF 17 USPTFULL
 PI US 5760026 980602
 AN 1998:61641 USPTFULL
 TI Method for treating mastitis and other staphylococcal infections
 IN Blackburn, Peter, New York, NY, United States
 Polak, June, Brooklyn, NY, United States
 PA Ambi Inc., Tarrytown, NY, United States (U.S. corporation)
 PI US 5760026 980602
 AI US 94-303551 940909 (8)
 RLI Continuation of Ser. No. US 92-935121, filed on 20 Aug 1992, now abandoned which is a continuation of Ser. No. US 90-535286, filed on 8 Jun 1990, now abandoned which is a continuation of Ser. No. US 88-188183, filed on 28 Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US 87-48412, filed on 11 May 1987, now abandoned
 DT Utility
 EXNAM Primary Examiner: Weddington, Kevin E.
 LREP White & Case L.L.P.
 CLMN Number of Claims: 5
 ECL Exemplary Claim: 1
 DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
 LN.CNT 844
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB **Lysostaphin** is used to eliminate and cure **staphylococcal** infections including the cure of mastitis by intramammary infusion. Administration of from 2 mg to 400 mg of **lysostaphin** to an infected bovine mammary gland eliminates **staphylococci**, and the reoccurrence common with antibiotic therapy is not observed. Teat-dips containing **lysostaphin**, mutanolysin and lysozyme can be used as.
 SUMM This application relates to the use of **lysostaphin** in the

treatment and prevention of **staphylococcal** infection and, in particular, to the treatment and prevention of **staphylococcal** bovine mastitis.

SUMM **Lysostaphin** is a bacteriocin secreted by a single known strain of **Staphylococcus simulans** originally isolated and named **Staphylococcus staphylolyticus** by Schindler and Schuhardt. The production of **lysostaphin** by **S. staphylolyticus** has been described previously in U.S. Pat. No. 3,278,378 issued Oct. 11, 1966 and in Proceedings of. . .

SUMM Bacteriocins are proteins secreted by bacteria that kill and sometimes lyse related bacteria. For example, **lysostaphin** lyses and kills practically all known **staphylococcal** species but is inactive against bacteria of all other genera. **Lysostaphin**, isolated from culture filtrates of **S. simulans** (NRRL B-2628) grown according to published references, is an endopeptidase which cleaves the polyglycine cross-links of the peptidoglycan found in the cell walls of **staphylococci**. In addition, cultures that produce **lysostaphin** appear to be resistant to its activities while cultures grown under non-**lysostaphin** producing conditions are sensitive.

SUMM Studies on the possible mechanism of antibiotic evasion of phagocytized **staphylococci** in mastitis treatment show that **lysostaphin** had been rejected as a candidate for destroying phagocytized **staphylococci**. Craven et al., 29 Research in Veterinary Science 57 (1980); Craven et al., 21 Antimicrobial Agents and Chemotherapy 618 (1982);. . . Comp. Immun. Microbial. Infect. Dis. 447 (1982)) Craven et al., 51 Journal of Dairy Research 513 (1984). In these experiments **lysostaphin** was used in vitro as a pretreatment to destroy extracellular **staphylococci** prior to exposing the phagocytized **staphylococci** to cloxacillin, gentamicin or **lysostaphin**. Craven et al.'s results strongly suggest that **lysostaphin** would have no effect on mastitis since intracellular **staphylococci** were still viable after 20 hours of incubation in a **lysostaphin** containing solution. 51 Journal of Dairy Research at 515-516, and Table 2.

SUMM . . . of chronic nasal staphylococcal infections (Quickel, Jr. et al., 22 Applied Microbiology 446 (1971)). In one case of a resistant **staphylococcal** infection, **lysostaphin** was given systemically (Stark et al., 291 Medical Intelligence 239 (1974)). In general, however, there has been great skepticism and. . .

SUMM . . . amount of **lysostaphin**, with or without surfactant, EDTA, penicillin or other potentiating agents, are used to achieve elimination of the **staphylococcal** infection. Preferably such infusions contain between 2 to 400mg **lysostaphin** when no potentiating agents are present. In combinations containing potentiating agents, the required effective doses of **lysostaphin** can be lowered. . .

SUMM . . . by conventional antibiotic (e.g. penicillin) therapy. In addition, penicillin and other similar acting substances may also be useful together with **lysostaphin** as an agent against **staphylococcal** infection and contamination.

DETD . . . strain 00 containing a recombinant plasmid which directs the synthesis of **lysostaphin**, as this provides for both high levels of **lysostaphin** production substantially free from **staphylococcal** immunogenic contaminants and facile **lysostaphin** purification since the **lysostaphin** accumulates directly in the growth medium. **Bacillus sphaericus** transformants containing the plasmid pBC16-1L have been found to be particularly suited. . .

DETD . . . developed either chronic or acute staphylococcal bovine mastitis despite prophylactic treatment. A single dose of from 2 to 400 mg **lysostaphin** per milk gland will eliminate the infection and cure **staphylococcal** mastitis in most instances. Additional doses of **lysostaphin** may be indicated where the infection is persistent. Doses significantly higher than 400 mg are not recommended

as they can.

DETD Table IC demonstrates the synergistic effect of **lysostaphin** /penicillin combinations on three strains of **staphylococci**. Depending on the doses of each, the combinations of **lysostaphin** plus penicillin can be 100 to 1000 times more effective than either **lysostaphin** or penicillin alone with all three strains.

DETD . . . **lysostaphin** which were sufficient to eliminate the infection did not produce adverse side effects and indicated that intramammary infusions of **lysostaphin** are effective against **staphylococcal** mastitis. At 125 .mu.g/kg, glands were cleared of infection by the 6 hour post-treatment sample and remained clear throughout the . . .

DETD TABLE IV

Efficacy of Intramammary Infusion of **Lysostaphin** Toward Experimental **STAPHYLOCOCCAL** Mastitis in Guinea Pig

Lysostaphin Dose .mu.g/kg					
ZERO	1.0	5.0	25.0	62.5	125.0

Number of animals					
(0/10)	(1/0)	(1/2)	(2/2)		
				(1/1)	(7/7)

cleared of infection

DETD It can be seen from these examples that **lysostaphin** is effective for treatment of **staphylococcal** mastitis and that its effect is greatly enhanced when used in combination with penicillin or with substances such as mild. . .

L13 ANSWER 4 OF 17 USPATFULL

PI US 5708160 980113

AN 1998:4758 USPATFULL

TI HSP-60 genomic locus and primers for species identification

IN Goh, Swee Han, Vancouver, Canada
Chow, Anthony W., West Vancouver, Canada
Hemmingsen, Sean, Saskatoon, Canada

PA The National Research Council, Ottawa, Canada (non-U.S. corporation)
University of British Columbia, Vancouver, Canada (non-U.S. corporation)

PI US 5708160 980113

AI US 95-429121 950426 (8)

DT Utility

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Fredman, Jeffrey

LREP Fish & Richardson, P.C.

CLMN Number of Claims: 10

ECL Exemplary Claim: 1,3

DRWN 9 Drawing Figure(s); 7 Drawing Page(s)

LN.CNT 1165

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . (Ausubel, et al., Current Protocols in Molecular Biology, Unit 2.4.1.-2.4.2., Greene Publishing Assoc. Inc., J. Wiley and Sons, Inc.). For **staphylococci**, **lysostaphin** (Sigma or recombinant product from Applied Microbiology, Inc., New York) was substituted for lysozyme in facilitating cell lysis. DNA concentration. . .

L13 ANSWER 5 OF 17 USPATFULL

PI US 5702895 971230

AN 97:123039 USPATFULL

TI Method and kit for detecting methicillin-resistant *Staphylococcus aureus*

IN Matsunaga, Hironari, Hiroshima, Japan
Tsukumo, Kenichi, Hiroshima, Japan
Wakisaka, Shinji, Hiroshima, Japan
Yamane, Akio, Hiroshima, Japan

09/120030

PA Wakunaga Seiyaku Kabushiki Kaisha, Osaka, Japan (non-U.S. corporation)
PI US 5702895 970110
AI US 96-586274 560116 (8)
PRAI JP 95-6390 950119
DT Utility
EXNAM Primary Examiner: Sisson, Bradley L.
LREP Oblon, Spivak, McClelland, Maier & Neustadt, P.C.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 747

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . a method using a protease such as proteinase K may also be employed. When enzymes which lyse membranes characteristic to **Staphylococci** such as **lysostaphin** and achromopeptidase are used, these enzymes enhance efficiency of extracting nucleic acids and elevate sensitivity of the examination.

L13 ANSWER 6 OF 17 USPATFULL

PI US 5587288 961224
AN 96:118502 USPATFULL
TI Regulation of exoprotein in Staphylococcus aureus
IN Cheung, Ambrose, New York, NY, United States
Fischetti, Vincent A., West Hempstead, NY, United States
PA The Rockefeller University, New York, NY, United States (U.S. corporation)
PI US 5587288 961224
AI US 94-248505 940524 (8)
DT Utility
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Fredman, Jeffrey
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 506

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD More specifically, the suspected **staphylococcal** isolate may be incubated with **lysostaphin** to digest the cell and release its DNA which is purified by any of the procedures known to the skilled. .

L13 ANSWER 7 OF 17 USPATFULL

PI US 5496706 960305
AN 96:18980 USPATFULL
TI Methods and materials for the detection of Staphylococcus aureus
IN Kuusela, Pentti, Helsinki, Finland
Hilden, Pekka, Helsinki, Finland
PA Helsinki University Licensing, Ltd., Helsinki, Finland (non-U.S. corporation)
PI US 5496706 960305
AI US 93-169524 931217 (8)
DT Utility
EXNAM Primary Examiner: Scheiner, Toni R.; Assistant Examiner: Parsons, Nancy J.
LREP Marshall, O'Toole, Gerstein, Murray & Borun
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 565

SUMM The present invention provides an approximately 230 kDa protein, designated MRSA-230, which is isolated from **lysostaphin** digests of methicillin-resistant **Staphylococcus aureus** which test negative in standard S. aureus agglutination assays. Anti-MRSA-230

L13 ANSWER 8 OF 17 USPATFULL

PI US 5437978 950801

AN 95:69206 USPATFULL

TI Detection for Staphylococcus spp.

IN Ubukata, Kimiko, Tokyo, Japan

Nakagami, Satoru, Hiroshima, Japan

Yamane, Akio, Miyoshi, Japan

PA Wakunaga Seiyaku Kabushiki Kaisha, Osaka, Japan (non-U.S. corporation)

PI US 5437978 950801

AI US 92-924458 920804 (7)

PRAI JP 91-195398 910805

DT Utility

EXNAM Primary Examiner: Patterson, Jr., Charles L.; Assistant Examiner: Kim, Hyosuk

LREP Bacon & Thomas

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 825

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DRWD . . . enzymes for hydrolyzing proteins of the bacteria. Any enzymes for lysing cell walls are available which can hydrolyze peptidoglycans of **Staphylococcus** spp., and so, for example, **lysostaphin**, acromopeptidase and the like can be used. On the other hand, any enzymes for hydrolyzing proteins are available which can. . .

L13 ANSWER 9 OF 17 USPATFULL

PI US 5342612 940830

AN 94:75297 USPATFULL

TI Compositions for the treatment of mammalian diseases

IN Daley, Michael J., Yardley, PA, United States

Steber, William D., Ledgewood, NJ, United States

Furda, Gary J., Trenton, NJ, United States

Johnston, Paul A., Langhorne, PA, United States

Oldham, Elizabeth R., Newtown, PA, United States

PA American Cyanamid Company, Wayne, NJ, United States (U.S. corporation)

PI US 5342612 940830

AI US 91-812894 911220 (7)

DT Utility

EXNAM Primary Examiner: Wityshyn, Michael G.; Assistant Examiner: Sayala, C.

LREP Morris, Michael P.

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 911

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . Med., 39:230 (1967) and bovine mastitis caused by *S. aureus* (Sears et al., J. Dairy Science, 71 (Suppl. 1): 244(1988)).

Lysostaphin, a gene product of **Staphylococcus simulans**, exerts a bacteriostatic and bactericidal effect upon *S. aureus* by enzymatically degrading the polyglycine crosslinks of the cell wall.

DETD Efficacy of **Lysostaphin** Formulated in Vehicles as an Intramammary Infusion Preparation Against **Staphylococcus Aureus** Mastitis

L13 ANSWER 10 OF 17 USPATFULL

PI US 5011772 910430

AN 91:34292 USPATFULL

09/120030

TI High yield protein production system
 IN Recsei, Paul A. New York, NY, United States
 PA Public Health Research Institute of the City of N.Y., New York, NY,
 United States (U.S. corporation)
 PI US 5011772 910430
 AI US 88-152635 880205 (7)
 DT Utility
 EXNAM Primary Examiner: Martinell, James
 LREP White & Case
 CLMN Number of Claims: 34
 ECL Exemplary Claim: 1
 DRWN 7 Drawing Figure(s); 5 Drawing Page(s)
 LN.CNT 909
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 SUMM **Lysostaphin** is a bacteriocin which lyses **staphylococci**
 . Plasmid pRG5 containing a 1.5 Kb cloned DNA fragment which codes for
 preprolysostaphin has been described in U.S. patent application. . .

L13 ANSWER 11 OF 17 USPATFULL
 PI US 4980163 901225
 AN 90:98514 USPATFULL
 TI Novel bacteriocin compositions for use as enhanced broad range
 bactericides and methods of preventing and treating microbial infection
 IN Blackburn, Peter, New York, NY, United States
 Gusik, Sara-Ann, New York, NY, United States
 Polak, June, New York, NY, United States
 Rubino, Stephen D., New York, NY, United States
 PA Public Health Research Institute of the City of New York, New York, NY,
 United States (U.S. corporation)
 PI US 4980163 901225
 AI US 89-317627 890301 (7)
 DT Utility
 EXNAM Primary Examiner: Schain, Howard E.; Assistant Examiner: Koh, Choon
 LREP White & Case
 CLMN Number of Claims: 24
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 445
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB . . . component is present in the enhanced broad range bactericide in
 sufficient amount such that the bactericide is more effective against
staphylococci than is **lysostaphin** alone and is more
 effective at treating and preventing a broad range of microbial
 infections. Methods of treating bacterial infections. . .
 SUMM . . . related to the species of their origin. **Lysostaphin** is a
 bacteriocin that lyses and kills practically all known species of
Staphylococcus, but is inactive against bacteria of other
 genera. **Lysostaphin**, isolated from culture filtrates of
Staphylococcus simulans (NRRL B-2628) grown according to
 published references, is an endopeptidase which cleaves the polyglycine
 cross-links of the peptidoglycan found. . .
 SUMM **Lysostaphin** is a naturally occurring bacteriocin secreted by a single
 known strain of *S. simulans* originally isolated and named
Staphylococcus staphylolyticus by Schindler and Schuhardt. The
 production of **lysostaphin** by *S. staphylolyticus* has been
 described previously in U.S. Pat. No. 3,278,378 issued Oct. 11, 1966 and
 in Proceedings of. . .
 SUMM . . . effective as a bactericide towards *Staphylococcus*, and nisin is
 present in an amount sufficient to enhance the bactericidal effect of
lysostaphin toward **Staphylococci**. Other compositions
 comprise **lysostaphin**, nisin, and a chelating agent and may
 also contain a surfactant. This composition in a carrier yields a novel
 bactericide. . .

SUMM . . . the bacteriocin nisin in the range of 0.1 to 300 .mu.g/ml and the resulting bactericide is significantly more bactericidal towards **Staphylococcus** than **lysostaphin** alone. The total bactericidal activity of such a novel bactericide is believed to be further potentiated and effective against a . . .
SUMM . . . strain 00, containing a recombinant plasmid which directs the synthesis of **lysostaphin**. This provides for production of high levels of **lysostaphin** substantially free from **staphylococcal** immunogenic contaminants and facile **lysostaphin** purification since the **lysostaphin** accumulates directly in the growth medium. *B. sphaericus* transformants containing plasmids pBC16-1L or PROJ6649-1L have been found to be particularly . . .
DETD Nisin alone in milk has little practical bactericidal activity towards **Staphylococci**. **Lysostaphin** alone in milk is bactericidal towards *S. aureus* and can produce more than a five log reduction in viable cells. . .

L13 ANSWER 12 OF 17 USPATFULL
PI US 4931390 900605
AN 90:44457 USPATFULL
TI Expression of the cloned **lysostaphin** gene
IN Recsei, Paul A., New York, NY, United States
PA Public Health Research Institute of the City of New York, Inc., New York, NY, United States (U.S. corporation)
PI US 4931390 900605
AI US 87-34464 870410 (7)
RLI Continuation-in-part of Ser. No. US 86-852407, filed on 16 Apr 1986, now abandoned
DT Utility
EXNAM Primary Examiner: Martinell, James
LREP White & Case
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 807

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides recombinant plasmids which is transformant **microbial** hosts express **lysostaphin**, a bacteriocin that kills most known **staphylococcal** species. The invention also provides **lysostaphin**, substantially free from non-**lysostaphin** contaminants. Recombinant plasmids, pRG5, pJP1, pDF8 and pRP1, were derived by inserting a 1.5 kilobase segment of DNA coding for. . .

PARN . . . application Ser. No. 852,407, filed Apr. 16, 1986, now abandoned. The present invention relates to novel plasmids which in transformant **microbial** hosts express the gene for **lysostaphin**. The invention also relates to **lysostaphin** so produced.

PARN **Lysostaphin** is a bacteriocin secreted by a single known strain of **Staphylococcus** simulans originally isolated and named **Staphylococcus** staphylolyticus by Schindler and Schuhardt. The production of **lysostaphin** by *S. staphylolyticus* has been described previously in U.S. Pat. No. 3,278,378 issued Oct. 11, 1966 and in Proceedings of. . .

PARN Bacteriocins are proteins secreted by bacteria that kill and sometimes lyse related bacteria. For example, **lysostaphin** lyses and kills practically all known **staphylococcal** species but is inactive against bacteria of all other genera. Although its catalytic properties are not well characterized, **lysostaphin** has. . .

PARN . . . and purification of **lysostaphin** by known techniques, however, results in a product that is contaminated to some degree by other **staphylococcal** products. Immunization of animals or man with **lysostaphin** contaminated by non-**lysostaphin**

09/120030

immunogenic material from **staphylococci** might result in an undesirable, and potentially adverse, immunological response. . . . 25,000 daltons. It is heat labile, non-dialyzable and has an isoelectric point of about pH 11. Furthermore, the capacity of **lysostaphin** to lyse viable and heat-killed **staphylococci** and **staphylococcal** cell walls is destroyed by treatment with the enzyme trypsin.

PARN In accordance with the present invention, recombinant plasmids are described which in transformant **microbial** hosts will express a gene encoding **lysostaphin**. The recombinant plasmids were derived by inserting an identified DNA sequence which codes for **lysostaphin** into suitable cloning vectors.

PARN The **lysostaphin** expressed as a result of transformation of **microbial** hosts by the above-mentioned plasmids and other plasmids containing the **lysostaphin** gene is substantially free of non-**lysostaphin** contaminants, especially immunogenic **staphylococcal** contaminants.

PARN The invention also provides for preprolysostaphin, prolysostaphin and **lysostaphin**, which is substantially free of non-**lysostaphin** immunogenic **staphylococcal** contaminants.

DETD The invention further encompasses those portions of the 1.5 kbp DNA fragment which code for the **lysostaphin** signal peptide, . . . immunologic cross-reactivity with **lysostaphin**-specific antibodies, catalytic activity. **Lysostaphin** produced by transformant microorganisms according to this invention is substantially free of non-**lysostaphin** contaminants, in particular immunogenic **staphylococcal** contaminants.

DETD Approximately 1% of the *B. subtilis* cells transformed with the ligated DNA produced **lysostaphin** as indicated by the lysis of **staphylococcal** cells surrounding the *B. subtilis* colonies. pJP1 was obtained by restreaking one of the *B. subtilis* transformants on **lysostaphin** indicator. . . .

DETD . . . of *B. sphaericus* 00/pJP1 transformants is substantially free of non-**lysostaphin** contaminants. Of special significance is that the *B. sphaericus* 00/pJP1 **lysostaphin** is substantially free of immunogenic **staphylococcal** contaminants.

CLM What is claimed is:
 1. Recombinant plasmids containing a DNA sequence which codes for **lysostaphin** and which in transformant **microbial** hosts will express a gene encoding **lysostaphin** from *S. simulans* (NRRLB-2628).

L13 ANSWER 13 OF 17 USPATFULL
 PI US 4902616 900220

AN 90:13352 USPATFULL
 TI Process for the preparation of capsular polysaccharides of **staphylococci**, the polysaccharides obtained, uses of these polysaccharides and strains for carrying out of the process

IN Fournier, Jean-Michel, Paris, France
 Bouvet, Anne, Paris, France

PA Institut Pasteur, Paris, France (non-U.S. corporation)
 PI US 4902616 900220

AI US 88-227137 880802 (7)
 PRAI FR 87-11006 870803

DT Utility

EXNAM Primary Examiner: Griffin, Ronald W.; Assistant Examiner: Webber, Pamela
 S.

LREP Burns, Doane, Swecker & Mathis

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN No Drawings

09/120030

LN.CNT 369

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD after bacterial lysis, brought about by autoclaving or by the use of a specific enzyme for **staphylococcus** such as **lysostaphin**

L13 ANSWER 14 OF 17 USPATFULL

PI US 4810567 890307

AN 89:17168 USPATFULL

TI Antimicrobial fabrics utilizing graft copolymers

IN Calcaterra, Lidia T., Des Plaines, IL, United States

DeFilippi, Louis J., Mt. Prospect, IL, United States

Childs, Michael E., Medford, NJ, United States

Latos, Edwin J., Chicago, IL, United States

PA UOP, Des Plaines, IL, United States (U.S. corporation)

PI US 4810567 890307

AI US 87-94767 870910 (7)

RLI Continuation-in-part of Ser. No. US 85-768090, filed on 21 Aug 1985, now abandoned

DT Utility

EXNAM Primary Examiner: Bell, James J.

LREP McBride, Thomas K.; Snyder, Eugene I.

CLMN Number of Claims: 19

ECL Exemplary Claim: 14

DRWN No Drawings

LN.CNT 945

DETD Fabrics containing bound **lysostaphin** were tested for **antimicrobial** properties on V-J agar media. In this test five 1-cm.sup.2 pieces of fabric were placed on V-J agar to which. . .

L13 ANSWER 15 OF 17 USPATFULL

PI US 4801449 890131

AN 89:7415 USPATFULL

TI Method for treatment of Kaposi's sarcoma

IN Balint, Jr., Joseph P., Seattle, WA, United States

Jones, Frank R., Edmonds, WA, United States

PA IMRE Corporation, Seattle, WA, United States (U.S. corporation)

PI US 4801449 890131

AI US 86-948268 861231 (6)

RLI Continuation-in-part of Ser. No. US 85-690781, filed on 11 Jan 1985, now patented, Pat. No. US 4681870

DT Utility

EXNAM Primary Examiner: Kight, John; Assistant Examiner: Nutter, Nathan M.

LREP Townsend & Townsend

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 544

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . to silica prepared as described above, and returned to the patient. The protein A was isolated from pure cultures of

Staphylococcus aureus Cowan I employing **lysostaphin**

digestion. Protein A purity was determined by polyacrylamide gel

electrophoresis, and IgG binding capacity was determined. The protein A was. . .

L13 ANSWER 16 OF 17 USPATFULL

PI US 4783484 881108

AN 88:72431 USPATFULL

TI Particulate composition and use thereof as antimicrobial agent

IN Violante, Michael R., Rochester, NY, United States

Steigbigel, Roy T., Miller Pl., NY, United States

PA University of Rochester, Rochester, NY, United States (U.S. corporation)

09/120030

PI US 4783484 881700
 AI US 84-658153 8 05 (6)
 DT Utility
 EXNAM Primary Examiner: Brown, J. R.; Assistant Examiner: Rollins, Jr., John W.
 LREP Kenyon & Kenyon
 CLMN Number of Claims: 29
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 899
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 DETD . . . leukocytes were centrifuged at 200 g for 10 minutes, decanted, and the pellet resuspended in PBS containing 10 U/ml of **lysostaphin** for lysis of the remaining extracellular **Staphylococci**. After 10 minutes in 37.degree. C. water bath, tubes were centrifuged 10 minutes at 200 g, decanted and the pellet. .

L13 ANSWER 17 OF 17 USPATFULL
 PI US 4681870 870721
 AN 87:52185 USPATFULL
 TI Protein A-silica immunoadsorbent and process for its production
 IN Balint, Jr., Joseph P., Seattle, WA, United States
 Hargreaves, Richard E., Seattle, WA, United States
 PA IMRE Corporation, Seattle, WA, United States (U.S. corporation)
 PI US 4681870 870721
 AI US 85-690781 850111 (6)
 DT Utility
 EXNAM Primary Examiner: Garvin, Patrick P.
 LREP Townsend & Townsend
 CLMN Number of Claims: 26
 ECL Exemplary Claim: 1
 DRWN 2 Drawing Figure(s); 2 Drawing Page(s)
 LN.CNT 616
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 DETD . . . to silica prepared as described above, and returned to the patient. The protein A was isolated from pure cultures of **Staphylococcus aureus** Cowan I employing **lysostaphin** digestion. Protein A purity was determined by polyacrylamide gel electrophoresis, and IgG binding capacity was determined. The protein A was. . .

=> d 13 pi,bib, kwic 1-17

L23 ANSWER 13 OF 280 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 8
 AN 1997:199416 BIOSIS
 DN PREV199799498619
 TI Studies on prolysostaphin processing and characterization of the **lysostaphin** immunity factor (Lif) of **Staphylococcus simulans** biovar **staphylolyticus**.
 AU Thumm, Guether; Goetz, Friedrich (1)
 CS (1) Mikrobielle Genet., Univ. Tuebingen, Waldhaeuser Stasse 708, D-72076 Tuebingen Germany
 SO Molecular Microbiology, (1997) Vol. 23, No. 6, pp. 1251-1265. ISSN: 0950-382X.
 DT Article
 LA English
 TI Studies on prolysostaphin processing and characterization of the **lysostaphin** immunity factor (Lif) of **Staphylococcus simulans** biovar **staphylolyticus**.
 AB **Lysostaphin** is an extracellular glycylglycine endopeptidase produced by **Staphylococcus simulans** biovar **staphylolyticus**

L23 ANSWER 1 OF 280 CAPLUS COPYRIGHT 1999 ACS

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5760026	A	19980602	US 94-303551	19940909
	US 5858962	A	19990112	US 93-168687	19931216

AN 1998:392144 CAPLUS

DN 129:23422

TI Method using **lysostaphin** for treating mastitis and other
staphylococcal infections

IN Blackburn, Peter; Polak, June

PA Ambi Inc., USA

SO U.S., 10 pp. Cont. of U. S. Ser. No. 935121, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5760026	A	19980602	US 94-303551	19940909
	US 5858962	A	19990112	US 93-168687	19931216

PRAI US 87-48412 19870511

US 88-188183 19880428

US 90-535286 19900608

US 92-935121 19920820

US 89-440092 19891122

TI Method using **lysostaphin** for treating mastitis and other
staphylococcal infections

AB **Lysostaphin** is used to eliminate and cure **staphylococcal**
infections including the cure of mastitis by intramammary infusion.
Administration of 2-400 mg of **lysostaphin** to an infected bovine
mammary gland eliminates **staphylococci**, and the reoccurrence
common with antibiotic therapy is not obsd. Teat-dips contg. **lysostaphin**,
mutanolysin and lysozyme can be used as. . .

ST **lysostaphin** mastitis **staphylococcal** infection; synergy
lysostaphin surfactant mastitis **staphylococcal**
infection; penicillin **lysostaphin** synergy mastitis
staphylococcal infection

IT Plasmids

(PBC16-1L; recombinant **lysostaphin** for treating mastitis and
other **staphylococcal** infections)

IT Escherichia coli

Klebsiella pneumoniae

Mastitis

Milk

Staphylococcus aureus

Staphylococcus epidermidis

Streptococcus agalactiae

Streptococcus uberis

(**lysostaphin** for treating mastitis and other
staphylococcal infections)

IT Bacillus sphaericus

(**lysostaphin** prodn. in; recombinant **lysostaphin** for
treating mastitis and other **staphylococcal** infections)

IT Antibacterial agents

Chelating agents

Surfactants

Synergistic drug interactions

(**lysostaphin**, and synergistic combinations, for treating
mastitis and other **staphylococcal** infections)

IT Genes

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (lysostaphin; recombinant lysostaphin for treating
 mastitis and other staphylococcal infections)

IT 9011-93-2P, Lysostaphin
 RL: BAC (Biological activity or effector, except adverse); BPN
 (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (lysostaphin for treating mastitis and other
 staphylococcal infections)

IT 55466-22-3, Mutanolysin
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lysostaphin for treating mastitis and other
 staphylococcal infections)

IT 9001-63-2, Lysozyme
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lysostaphin, and combinations, for treating mastitis and
 other staphylococcal infections)

IT 61-32-5, Methicillin 1405-87-4, Bacitracin 1406-05-9, Penicillin
 1406-11-7, Polymyxin 9002-93-1, Triton X-100 11111-12-9, Cephalosporin
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lysostaphin, and synergistic combinations, for treating
 mastitis and other staphylococcal infections)

IT 9073-60-3, Penicillinase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (penicillinase-pos. Staphylococcus aureus;
 lysostaphin for treating mastitis and other
 staphylococcal infections)

L23 ANSWER 2 OF 280 CAPLUS COPYRIGHT 1999 ACS
 PATENT NO. KIND DATE APPLICATION NO. DATE

<-----User Break----->

DN 129:51424
 TI Preparation of the luciferase-lysostaphin fusion protein for
 detection of Staphylococcus aureus by bioluminescence analysis
 IN Tatsumi, Hiroki; Fukuda, Masaru; Nagahara, Ayumu
 PA Kikkoman Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10150991	A2	19980609	JP 96-328042	19961125
TI	Preparation of the luciferase-lysostaphin fusion protein for detection of Staphylococcus aureus by bioluminescence analysis				
AB	Disclosed are a fusion protein comprised of luciferase[217-Leu] of Luciola lateralis and the C-terminal fragment of lysostaphin of Staphylococcus simulans (NRRL B-2628) by expression of its encoding chimeric gene in Escherichia coli and use of the fusion protein for. . .				
ST	luciferase lysostaphin fusion protein Escherichia prepn; Staphylococcus detection luciferase lysostaphin fusion				
IT	Genes (microbial) RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses) (chimeric; prepn. of luciferase-lysostaphin fusion protein for detection of Staphylococcus aureus by bioluminescence				

09/120030

anal.)
IT Chimeric genes
RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified);

09/120030